



The Pinnacle of Camera Mounting



Modular Towers
& Columns



Tubular Poles
Fixed & Tilt Down



Cabinet Based
Poles



Ornate Poles



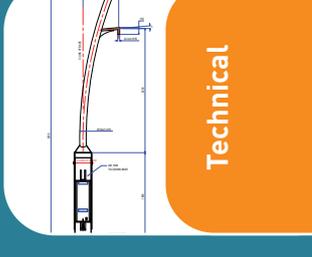
Transport &
Infrastructure



Brackets &
Accessories



Cabinets



Technical

Altron successfully proposed, designed, manufactured and delivered, on time, over 1300 deployable camera poles and cylindrical bases, in the lead up to 2012's major sporting event.



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Welcome to our comprehensive guide to CCTV camera mounting equipment.

Whilst most applications should be covered in this catalogue, we can supply variations to many of our products and also produce products tailored to suit associated industry needs.

Please feel free to contact us.

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← Supply

We have a large range of stock, enabling us to ship your order in the shortest time possible. This includes most brackets, towers and columns and a selection of our most popular poles.

Delivery →

With our own fleet of delivery vehicles we are able to offer a first class, professional delivery service across the whole of the UK.

We have a great deal of experience in organising shipments to countries across the world and have selected a small number of expert shipping companies to service these markets, with containers shipping weekly.

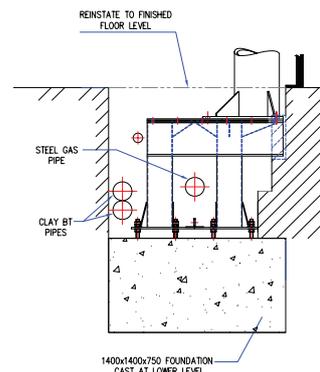


Support

Our dedicated knowledgeable people are able to support you in finding the best product for your needs.

There are many technical services available, including advising on site specific foundations and providing specific calculations and information to satisfy your client's needs.

We can train your people to operate our products safely and competently and offer training in winch operation for our tilting, telescopic and lowering trolley head poles.



Buried flange foundation detail

With our history and service you can be sure.... You're Safe with Altron

→ Worldwide Presence



Altron supplies to markets worldwide, with countries in the Middle East being of particular importance.

Here is a small selection of projects to date:-



← AW1545 Tilt Down at central area of highway Kuwait



AW1859 located roadside Oman ↑



Monopole located within petrochemical refinery Qatar →



← AW1545UP at Doha Cultural Centre Qatar



ACT Lattice tower located at petrochemical installation Middle East →



You're Safe with Altron

We are dedicated to supplying the most secure products of the highest standard to ensure your CCTV installations are the best they can be. With our industry leading secure features you're safe with Altron.



Altron designed secure locks

Heavy duty latch resists lever attacks and close fitting oval spindle means lock cannot be operated without correct key.



Flush door

Altron's unique flush door design has 1mm clearance all round, preventing successful lever attacks.



Secure vents

Mesh-covered offset internal aperture and vent orientation with ground level combine to hinder access through vent.



ALTRON

Altron Communications Equipment Ltd



The pinnacle of camera mounting

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ACC2BPLA



ACT2BP

Altron's range of Modular Towers and Columns are a practical and economic solution to many commercial and industrial CCTV installations. Sectional construction means economic shipping and easy installation in more inaccessible locations.

We offer the most comprehensive range available with tilt-down models up to 15 metres and fixed models up to 25 metres with telescopic, cabinet based and internally cabled products completing the range.

Altron's numerous security design features ensure a good level of resistance against vandal attacks.



ACC2FBLA

Fixed height range 4.5m - 10m
Tilt-down height range 4.5m - 15m

Altron Camera Columns, a cost effective and comprehensive range with most models available 'ex stock', offering a good level of security. Suitable for installations where the public has access - tilt-down models have internal padlock facility. The range is generally for light to medium fixed and PTZ applications, but there are also heavy duty (HD) options for high loading PTZ and dual lighting & CCTV applications.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Schools and universities
- o Railway platforms & car parks
- o Car parks
- o Petrochemical sites
- o Sports stadia

Security Features

- o Internal cabling
- o Internal padlock facility on tilt-down models to protect against unauthorised lowering
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Modular construction for ease of assembly and installation on site
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure tilt down models are secure and reduces costs on multiple installations
- o Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs
- o Tilt Down models available in both bolt down and post mounted base versions
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Quick turnaround for larger projects
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107



Tilt-down columns have the facility to be padlocked internally



All columns have flush fitting doors

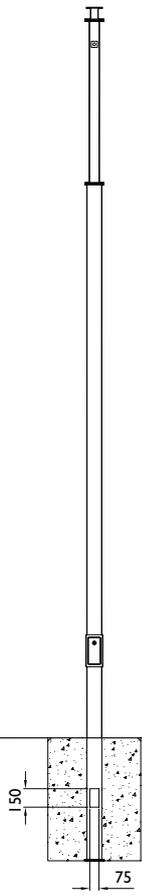


ACC2BPLA in tilted position

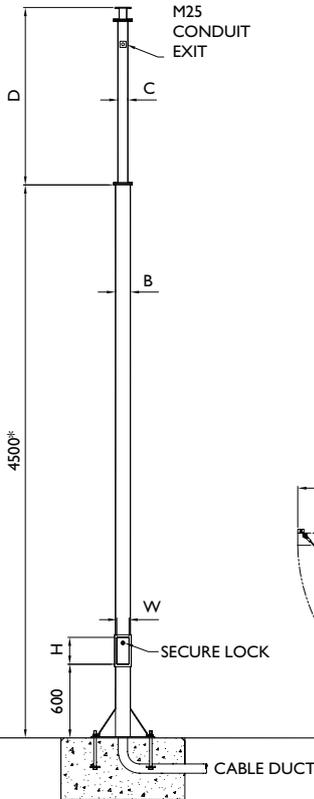
ACC Modular Columns ← Technical Specifications

ACC

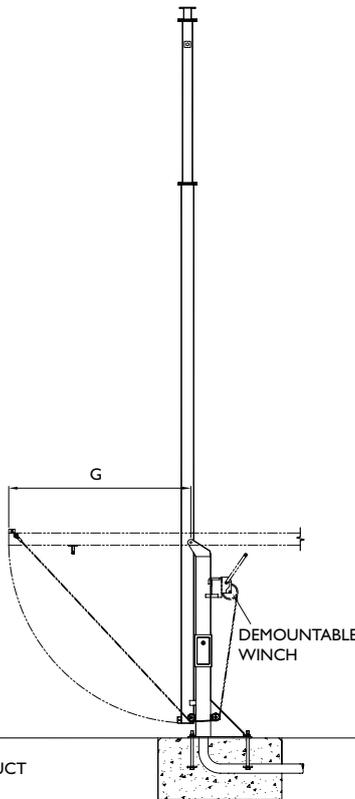
EB
Embedded Base



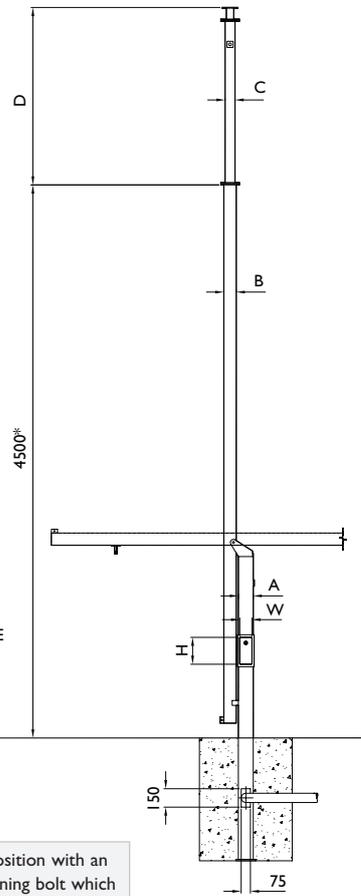
FB
Fixed Base



BP
Base Post



PM
Post Mounted



All camera mounting plates are \varnothing 127 with 8 No \varnothing 8.5 equi-spaced on 101.6 PCD. \varnothing 40 thro' column spacer

Tilt down columns are fixed in the vertical position with an M20/M24 nut screwed onto the column retaining bolt which enters into the secure access hatch through the front of the post. This is then padlockable to stop unauthorised tilting.

FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 21

* On models ACC4HD, ACC12 & ACC15 this dimension = 4900

Model No.	Height in mtrs	Post type	Max equip weight at top kgs	Max equip surface area m ²	Post size A ²	Lower section B ²	Mid section B ²	Upper section C ²	Extension length D mtrs	Door aperture size HxW	Column Rear clearance when tilting G	Winch part number	Product weight kgs	
ACC1 Standard Duty	4.5	FB/EB	35	0.3	-	100	-	-	-	250x70	-	-	68	
		PM	35	0.3	120	100	-	-	-	270x80	1700	DW1000/AC	100	
		BP	35	0.3	120	100	-	-	-	270x80	1700	DW1000/AC	115	
ACC2 Standard Duty	6	FB/EB	25	0.2	-	120	-	90	1.5	270x80	-	-	114	
		PM	25	0.2	120	100	-	80	1.5	270x80	1700	DW1000/AC	115	
		BP	25	0.2	120	100	-	80	1.5	270x80	1700	DW1000/AC	130	
ACC2HD 6 Heavy Duty	6	FB/EB	35	0.3	-	150	-	100	1.5	280x110	-	-	144	
		PM	35	0.3	120	120	-	90	1.5	270x80	1700	DW1000/AC	138	
		BP	35	0.3	120	120	-	90	1.5	270x80	1700	DW1000/AC	157	
ACC3 Standard Duty	7.5	FB/EB	25	0.2	-	150	-	100	3	280x110	-	-	161	
		PM	25	0.2	150	120	-	90	3	280x110	2000	DW1500/AC	189	
		BP	25	0.2	150	120	-	90	3	280x110	2000	DW1500/AC	193	
ACC3HD 7.5 Heavy Duty	7.5	FB/EB	50	0.3	-	200	-	120	3	315x150	-	-	178	
		PM	50	0.3	150	150	-	100	3	280x110	2000	DW1500/ACHD	218	
		BP	50	0.3	150	150	-	100	3	280x110	2000	DW1500/ACHD	222	
ACC4 Standard Duty	9	FB/EB	25	0.16	-	150	-	100	4.4	280x110	-	-	197	
		PM	25	0.16	150	150	-	100	4.4	280x110	2000	DW2500/AC	244	
		BP	25	0.16	150	150	-	100	4.4	280x110	2000	DW2500/AC	248	
ACC4HD 10 Heavy Duty	10	FB/EB	50	0.5	-	200	-	150	4.9	315x150	-	-	305	
		PM	50	0.5	200	200	-	150	4.9	315x150	2400	DW2500/ACHD	492	
		BP	50	0.5	200	200	-	150	4.9	315x150	2400	DW2500/ACHD	500	
ACC12	12	PM	35	0.3	200	200	150	100	i 4.9	ii 4.9	315x150	2400	DW2500/ACHD	518
		BP	35	0.3	200	200	150	100	4.9	4.9	315x150	2400	DW2500/ACHD	526
ACC15	15	PM	25	0.16	200	200	150	100	4.9	4.9	315x150	2400	DW2500/ACHD	555
		BP	25	0.16	200	200	150	100	4.9	4.9	315x150	2400	DW2500/ACHD	563

Where payloads are greater than those stated above, please contact Altron
EB Version is directly embedded
All dimensions in mm unless stated otherwise

Accessories

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Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Column top mounting cages	P83

Quick reference

Single fixed camera knuckle	PTS-1
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AWI699H
Full swanneck for dome	AWI699F
Anti climb guard	SGC
Telemetry bracket	ATBC

→ AW1697 Cabinet Columns & ACC Telescopic Columns



AW1697/6

AW1697

Height range 4.5m - 15m

A cost effective and comprehensive range with most models available 'ex stock', offering a good level of security. The column base post has a built in cabinet for mounting equipment within the one unit, therefore providing cost savings where a separate cabinet would otherwise need to be used. Suitable for installations where the public has access, these columns have an internal padlock facility. The range is generally for light to medium fixed and PTZ applications, but there are also heavy duty (HD) options for high loading PTZ and dual lighting & CCTV applications.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Schools and universities
- o Sports stadia
- o Railway platforms & car parks
- o Car parks
- o Petrochemical sites
- o Securing compounds

Security Features

- o Internal cabling
- o Internal padlock facility
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Modular construction for ease of assembly and installation on site
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure tilt down models are secure and reduces costs on multiple installations
- o Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs
- o Tilt Down models available in both bolt down and embedded base versions
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Quick turnaround for larger projects
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107



ACC/TEL/8

Telescopic

Height range 4m - 8m

Altron's range of telescopic columns offer the facility to maintain camera equipment at low level without the need to 'tilt-down' the column. This has the advantage of enabling maintenance for cameras in restricted area locations where a cherry picker does not have access. The range is for light to medium fixed and PTZ applications.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Railway platforms
- o Railway marshalling areas
- o Roof mounted locations

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks
- o Padlockable winch cover and cable guard

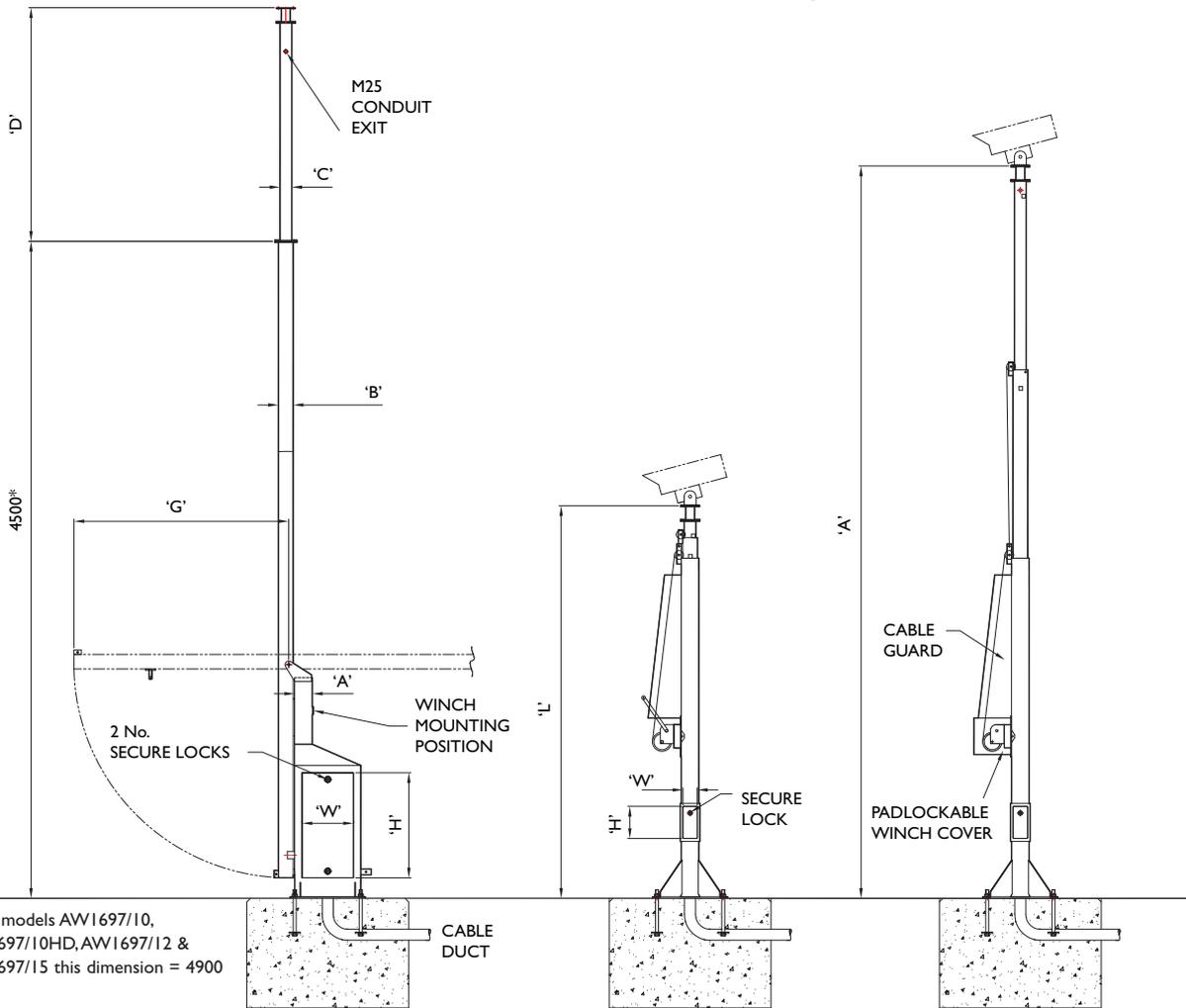
General Features

- o Enables cameras to be mounted in locations that they otherwise could not be.
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Enables camera maintenance at ground level, therefore reducing maintenance costs.
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o For design, manufacturing and finishing standards, see details on page 107

AW1697 Cabinet Columns & ACC Telescopic Columns Technical Specification ←

AW1697 Cabinet Base Column

ACC Telescopic Column



* On models AW1697/10, AW1697/10HD, AW1697/12 & AW1697/15 this dimension = 4900

Tilt down columns are fixed in the vertical position with an M20/M24 nut screwed onto the column retaining bolt which enters into the secure access hatch through the front of the post. This is then padlockable to stop unauthorised tilting.

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

Telescopic column suitable for restricted site access locations. E.g Railway yards/platforms where camera needs to be serviced at ground level

FOR FOUNDATION & BOLTING DETAILS REFER TO PAGE 21

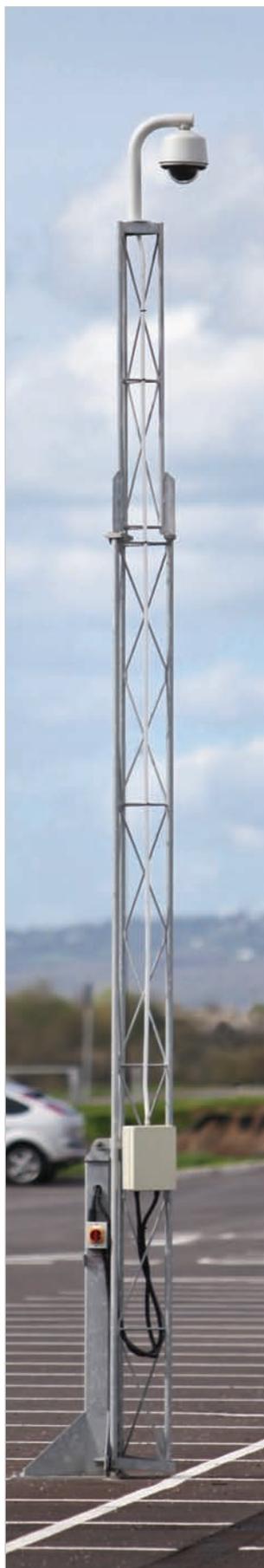
Model No.	Height in mtrs	Post type	Max equip weight at top kgs	Max equip surface area m ²	Post size A ²	Lower section B ²	Mid section B ²	Upper section C ²	Extension length D1 mtrs	Extension length D2 mtrs	Door aperture size HxW	Column rear clearance when tilting G	Winch part number	Product weight kgs
AW1697/4.5	4.5	BP	35	0.3	120	100	-	-	-	-	600x350	1700	DW1000/97	180
AW1697/6	6	BP	25	0.2	120	100	-	80	1.5	-	600x350	1700	DW1000/97	192
AW1697/6HD	6	BP	35	0.3	120	120	-	90	1.5	-	600x350	1700	DW1000/97	220
AW1697/7.5	7.5	BP	25	0.2	150	120	-	90	3.0	-	600x350	2000	DW1500/97	244
AW1697/7.5HD	7.5	BP	50	0.3	150	150	-	100	3.0	-	600x350	2000	DW1500/97HD	273
AW1697/9	9	BP	25	0.16	150	150	-	100	4.5	-	600x350	2000	DW2500/97	299
AW1697/10	10	BP	50	0.5	200	200	-	150	4.9	3.0	600x350	2400	DW2500/97HD	551
AW1697/12	12	BP	35	0.3	200	200	150	100	4.9	3.0	600x350	2400	DW2500/97HD	577
AW1697/15	15	BP	25	0.16	200	200	150	100	4.9	4.9	600x350	2400	DW2500/97HD	614

Accessories	
Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Column top mounting cages	P83

Telescopic Columns														
Model	Height A mtrs	Post type	Max equip weight kgs	Max equip surface area m ²	Post size A ²	Lower section B ²	Mid section B ²	Upper section C ²	Extension length D1 mtrs	Extension length D2 mtrs	Door aperture size HxW	Column rear clearance when tilting G	Winch part number	Product weight kgs
ACC/TELE/4	4	FB	35	0.25	-	100	80	60	-	-	200x90	2.1	Included	95
ACC/TELE/6	6	FB	35	0.25	-	120	100	80	-	-	280x110	3	Included	156
ACC/TELE/8	8	FB	25	0.11	-	120	100	80	-	-	280x110	3.8	Included	195

Quick reference	
Single fixed camera knuckle	PTS-1
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
Telemetry bracket	ATBC

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise



ACT2BP

Fixed height range 4.5m - 12m
Tilt-down height range 4.5m - 14m

Altron Camera Towers, a cost effective and comprehensive range with most models available 'ex stock'. Giving good rigidity they are suitable for exposed, high wind load locations. The range is for medium to heavy camera installations, and for dual lighting & CCTV applications, or lighter applications where rigidity is paramount. ACT Towers are not ideally suited to public area installations due to their climbable nature and external camera cabling.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Car parks
- o Petrochemical sites
- o Securing compounds
- o Military and high security sites

General Features

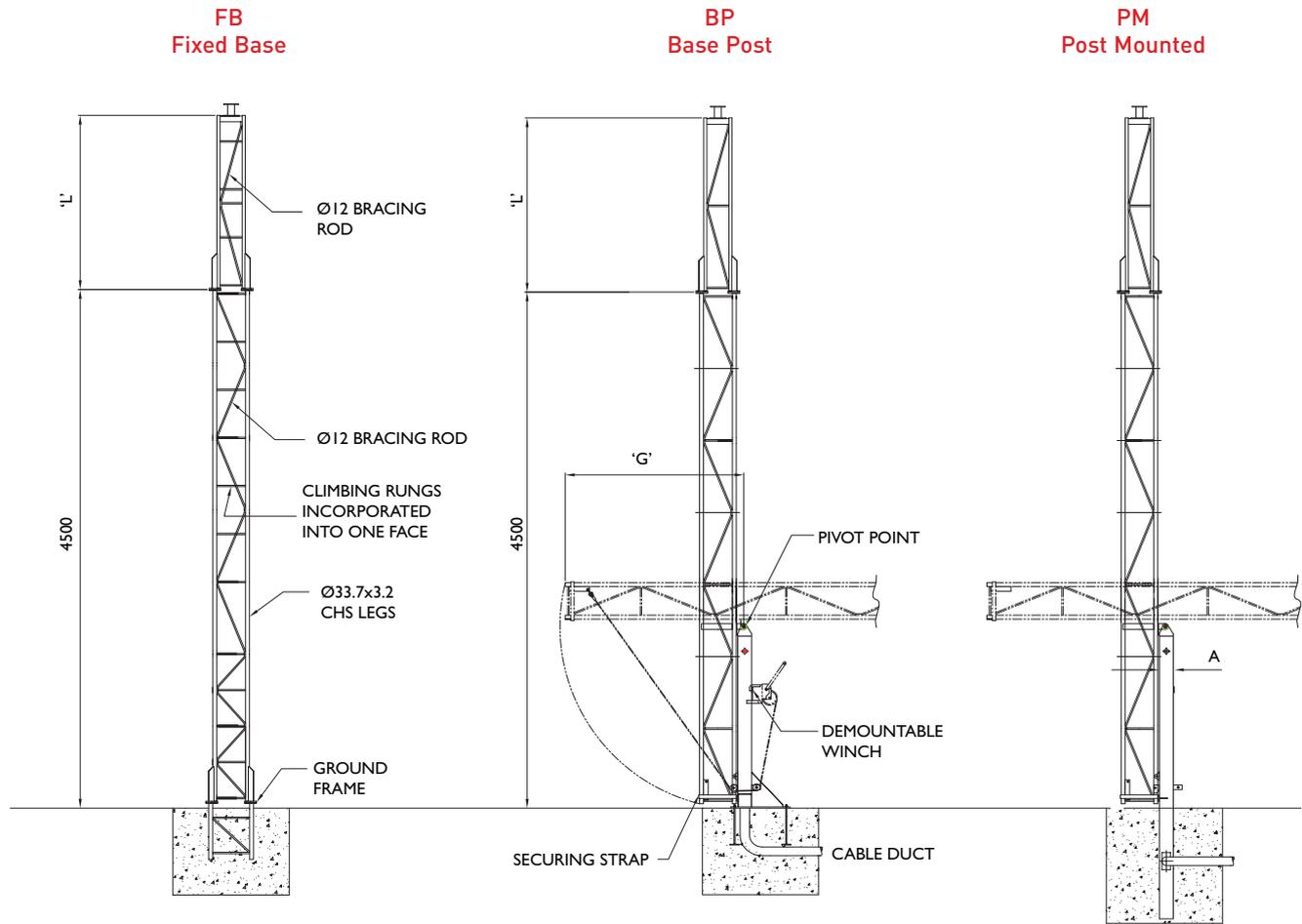
- o Modular construction for ease of assembly and installation on site
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure tilt down models are secure and reduces costs on multiple installations
- o Tilt Down models enable camera maintenance at ground level, therefore reducing maintenance costs
- o Tilt Down models available in both bolt down and post mounted versions
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Simple system of casting ground frame, bolts or post
- o Conduit cabling system available as an option
- o Quick turnaround for larger projects
- o Available with AWI697 Cabinet if required (See page 13)
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107



ACTI BP in tilted position

ACT Modular Towers ← Technical Specifications

ACT



All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

FOR FOUNDATION & BOLTING DETAILS REFER TO PAGE 21

Model No.	Height in mtrs	Post type	Max equip weight at top kgs	Max surface area m ²	Post size A ²	Mid length mtrs L	Top length mtrs	Tower rear clearance when tilting G	Winch part number	Product weight kgs
ACT1 Standard Duty	4.5	FB	40	0.4	-	-	-	-	-	55
		PM	40	0.4	120	-	-	1700	DW1000/AT	98
		BP	40	0.4	120	-	-	1700	DW1000/AT	115
ACT2 Standard Duty	6	FB	40	0.4	-	-	1.5	-	-	70
		PM	40	0.4	120	-	1.5	1700	DW1000/AT	118
		BP	40	0.4	120	-	1.5	1700	DW1000/AT	135
ACT3 Standard Duty	7.5	FB	35	0.25	-	-	3	-	-	81
		PM	35	0.25	120	-	3	1700	DW1500/AT	131
		BP	35	0.25	120	-	3	1700	DW1500/AT	147
ACT3HD Heavy Duty	7.5	FB	40	0.35	-	-	3	-	-	107
		PM	40	0.35	150	-	3	2000	DW1500/ATHD	193
		BP	40	0.35	150	-	3	2000	DW1500/ATHD	197
ACT4HD Heavy Duty	9	FB	35	0.25	-	-	4.5	-	-	124
		PM	35	0.25	150	-	4.5	2000	DW1500/ATHD	204
		BP	35	0.25	150	-	4.5	2000	DW1500/ATHD	208
ACT12	12	FB	25	0.2	-	4.5	3	-	-	150
		BP	25	0.2	180	4.5	3	2200	DW2500/AT	237
		PM	25	0.2	180	4.5	3	2200	DW2500/AT	233
ACT14 Telescopic	14	BP	50	0.25	200	-	7	2500	DW1500/AT14	387
		PM	50	0.25	200	-	-	2500	DW1500/AT14	341

Accessories	
Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Tower top mounting cages	P83

Quick reference	
Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
Telemetry bracket	ATBT

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise



ANCT6

Height range 4m - 10m

Altron Nested Camera Towers are designed to be a secure mounting solution, where a lattice tower is the preferred mounting option. Cabling through the tower is completely concealed thanks to its patented hinge design and there is a secure access door and treated backboard within the base post so that connections and equipment are situated inside the tower.

Installation is made easy by the use of a simple bolt frame for setting the holding down bolts and a large entry point into the base post provides clear access for cable ducts. The footprint of the tower is small and the appearance is neat and compact due to the base post 'nesting' inside the tower.

ANCT towers give good rigidity and are suitable for exposed locations. Ideal for medium to heavy camera installations or lighter applications where rigidity is paramount, a full range of accessories are available and all tower components are held in stock. **ANCT Towers** are not ideally suited for public area installations due to their climbable nature.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Utilities sites
- o Car parks
- o Petrochemical sites
- o Securing compounds
- o Military and high security sites

Security Features

- o Internal cabling
- o Internal padlock facility
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Modular construction in 2 metre sections for ease of assembly and installation on site
- o Large integrated cabinet, allowing equipment mounting and internal cable connections
- o Patented method of internal cabling pathway, through cabinet and tilt-mechanism, up through tower leg and exiting via conduit exit points.
- o Simple method of pre-casting base connections - only bolts need to be cast, no other steelwork
- o Large cable duct entry into bottom of base post
- o Ideal for restricted access areas
- o Provides stable mounting platform for all camera types
- o Demountable winches ensure towers are secure and reduces costs on multiple installations
- o Enables camera maintenance at ground level, therefore reducing maintenance costs
- o A wide range of standard Altron Accessories and Brackets available ex stock
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107



ANCT winch mounting arrangement



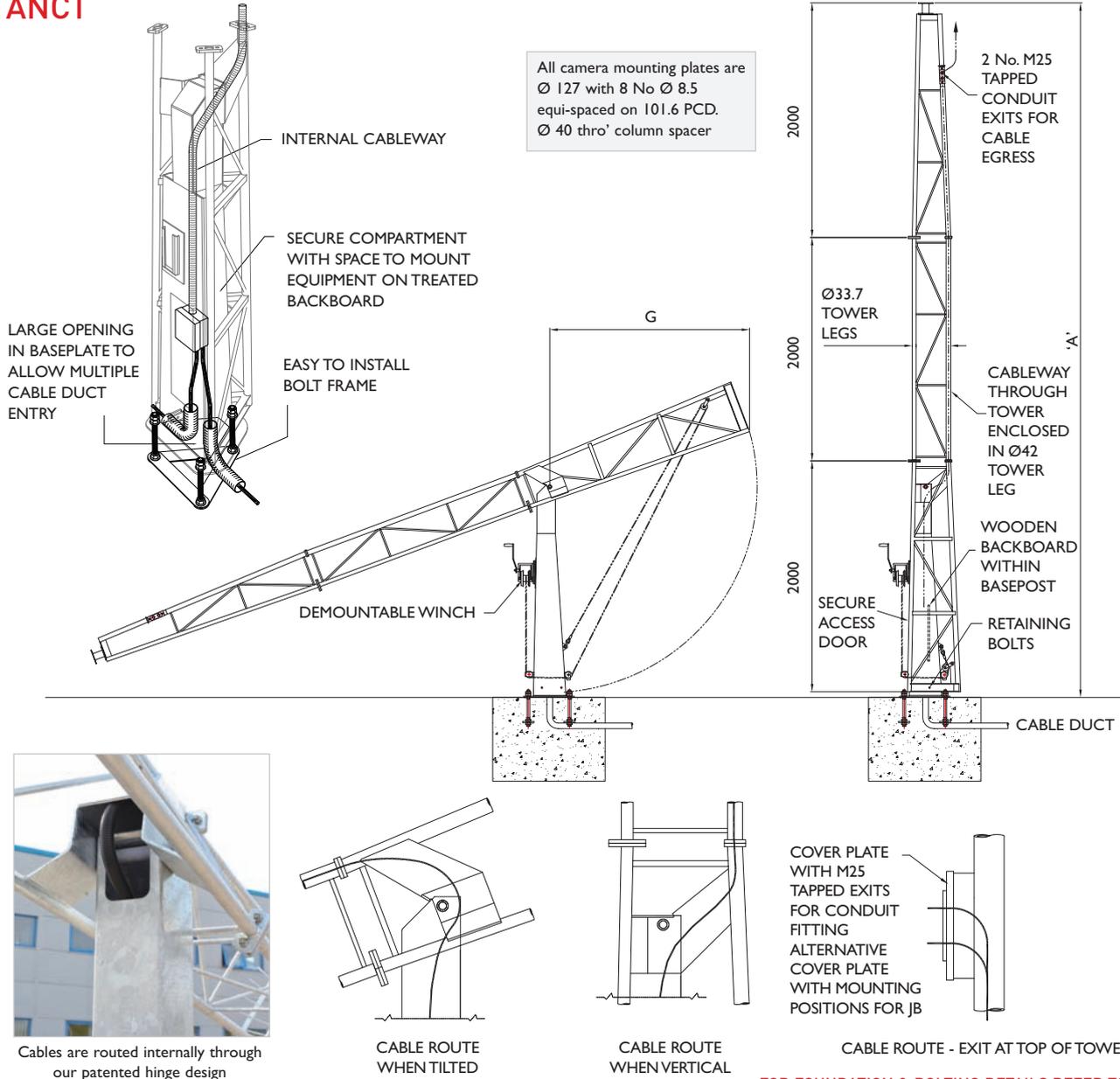
Large equipment mounting backboard



ANCT/6 in tilted position

ANCT Modular Towers ← Technical Specifications

ANCT



Cable and Conduit Installation Notes

When installing cables within the lower leg, cables should be enclosed within flexible conduit. Where there are too many cables to fit inside a continuous flexible conduit, then a split conduit should be used at the hinge point between the base post and the tower section, locally (see photograph on this page showing flexible conduit in position). Some slack should be left in cables – approx 100mm – to ensure that the cables do not pull tight when the tower tilts down.

Model No.	Height mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Tower rear clearance when tilting G	Cabinet door size H x W	Back board size & compartment depth H x W x D	Winch part number	Product weight kgs
ANCT 4	4	50	0.5	2000	600x165	570x170x150	DW1000/ANCT	145
ANCT 6	6	50	0.4	2000	600x165	570x170x150	DW1000/ANCT	172
ANCT 8	8	30	0.25	2000	600x165	570x170x150	DW2500/ANCT	199
ANCT 10	10	25	0.2	2000	600x165	570x170x150	DW2500/ANCT	226

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P78
Telemetry box mounting brackets	P77
Tower top mounting cages	P83

Quick reference

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGT3/HD
Telemetry bracket	ATBT

ASST Towers 15m - 25m

A range of heavy duty lattice towers suitable for more demanding applications than those covered by our ACT range, including heavy load and high wind areas.

Supplied with or without ladder and fall arrest.

25m

20m

15m

STANDARD PTZ MOUNTING PLATE WITH 8 No. Ø8.5 HOLES EQUI-SPACED ON A Ø101.6 PCD

FALL ARREST LADDER CONNECTION TESTED IN ACCORDANCE WITH BS EN 795

BS4211 CLASS 'A' LADDER

4400mm PARALLEL TOWER SECTION

TAPERED JOINING PIECE 535mm TYPICAL

The tower range shown on these pages is indicative of tower arrangements for mounting CCTV cameras with and without ladders and fall arrest. We can also provide towers for telecoms, datacoms, anemometers, small wind turbines, microwave, telemetry, lighting and towers incorporating working platforms, service platforms, ladder cages etc. Please contact us for further details.

HINGED LADDER GUARD PADLOCKABLE
ANTI-CLIMB MESH PANELS

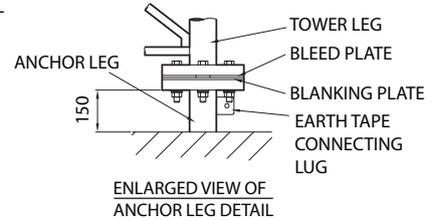
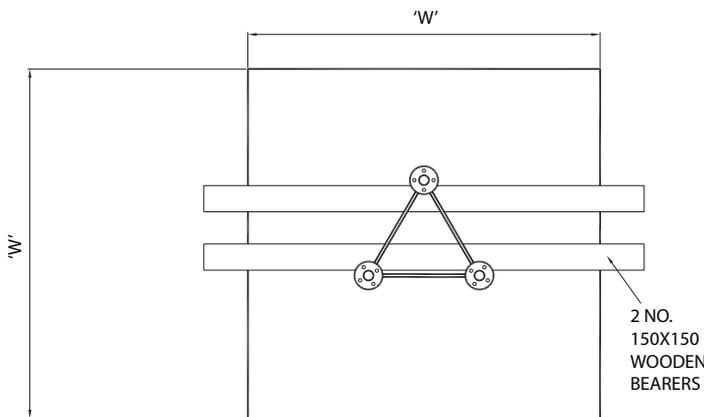
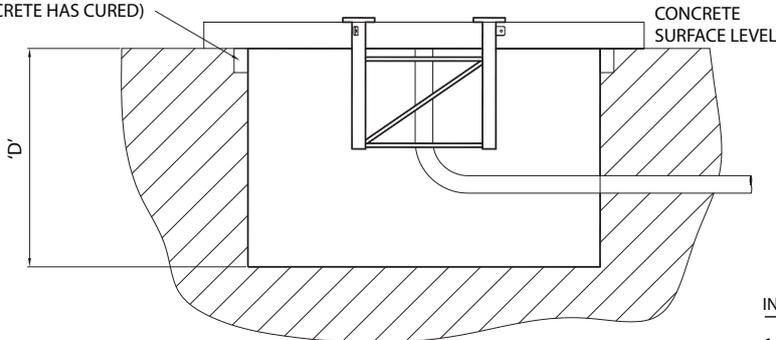
Features

- o Modular construction - Longest tower length = 4.4m for ease of transportation and installation.
- o Ladders & fall arrest tested to comply with ISO standards.
- o Comprehensive range of accessories.
- o Service platforms available.
- o Versatile and adaptable design due to interchangeable modules and our specialist in house software. Optimum tower solutions can be proposed, depending on level of equipment fitted, headload and location.

For design and construction standards see page 107.

ASST

SHUTTERING (REMOVE & BACKFILL ONCE CONCRETE HAS CURED)



INSTALLATION METHOD

- 1/ EXCAVATE FOUNDATION PIT AS PER SIZE STATED.
- 2/ SHUTTER OFF TOP EDGE OF FOUNDATION PIT.
- 3/ SET TOWER ANCHOR FRAME INTO PIT - SUPPORTED BY 2 No. WOODEN BEARERS SPANNING THE PIT AND LEVEL.
- 4/ TOP OF FRAME TO BE LEVEL WITHIN 2mm.
- 5/ POSITION CABLE DUCTS IF APPLICABLE.
- 6/ CHECK TOWER ANCHOR LEGS FOR LEVEL DURING AND AFTER POURING CONCRETE. ANCHOR LEGS BEING LEVEL IS IMPERATIVE FOR THE CORRECT INSTALLATION OF THE TOWER.

NOTES

- 1/ SAFETY FACTOR ON FOUNDATION TO RESIST OVERTURNING OF >2.
- 2/ FOUNDATION SHALL BE FOUNDED ON NATURAL GROUND WITH MINIMUM SAFE BEARING CAPACITY OF 100KN/m² OR BETTER.
- 3/ ALLOW A MINIMUM OF 7 DAYS AFTER POURING CONCRETE BEFORE INSTALLING TOWER.
- 4/ CONCRETE GRADE C35.

FOUNDATION SIZES FOR THE UK TOWER HEAD LOAD

Camera equipment weight = 40KGS
Camera equipment surface area = 0.25m²

TOWER PART NUMBER	TOWER HEIGHT M	COUNTRY LOCATION			TOWN LOCATION		
		AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
TOWERS WITHOUT LADDER AND FALL ARREST							
ASST/15	15	1.8x1.8x1	2x2x1	2x2x1	1.7x1.7x0.9	1.8x1.8x0.9	1.8x1.8x0.9
ASST/20	20	2x2x1	2.1x2.1x1	2.2x2.2x1.2	1.8x1.8x1	2x2x1	2x2x1.2
ASST/25	25	2.2x2.2x1.2	2.4x2.4x1.2	2.5x2.5x1.2	2x2x1.2	2.2x2.2x1.2	2.4x2.4x1.2
TOWERS WITH LADDER AND FALL ARREST							
ASST/15/HD	15	2x2x1	2x2x1.2	2.1x2.1x1.2	1.8x1.8x1	2x2x1	2x2x1.2
ASST/20/HD	20	2.3x2.3x1.2	2.5x2.5x1.2	2.7x2.7x1.2	2.2x2.2x1.2	2.3x2.3x1.2	2.5x2.5x1.2
ASST/25/HD	25	2.7x2.7x1.2	2.8x2.8x1.2	3x3x1.2	2.5x2.5x1.2	2.7x2.7x1.2	2.8x2.8x1.2

Foundations sizes are W x W x D - Dimensions in metres

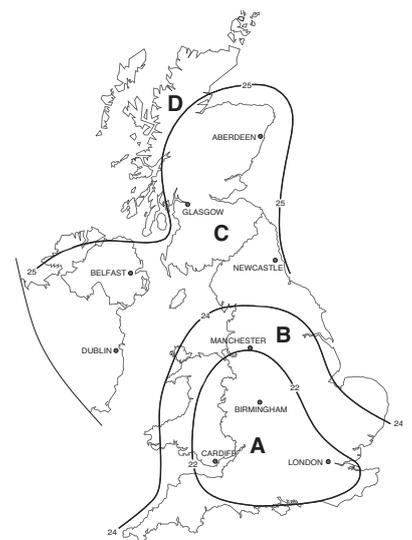
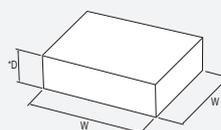
FOR FOUNDATION SIZES:- A MINIMUM SOIL BEARING PRESSURE OF 75kN/m² IS ASSUMED

Minimum concrete Grade C35

Allow 72 hours after pouring concrete before installing pole or tower

Please note that foundation sizes shown in the table above are in accordance with recommended headload and windload capacities shown in technical specification tables.

For increased headloads – foundations may need to increase in size – please contact us for revised foundation sizes for specific installations.



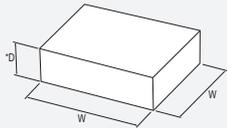
- WIND SPEED AREAS 22m/s, 24/s, 25m/s TAKEN FROM FIG 6 BS6399 - BASIC WINDSPEEDS Vb.
- SITE MEAN WINDSPEEDS (Vs) FOR AREAS A, B & C ARE:- A= 24.2m/s(100m ASL) B=26.4m/s(100m ASL) C=28.8m/s(150m ASL)
- ACTUAL WIND VELOCITY FOR THESE WINDSPEEDS (Ve) ARE:- A= 41.8m/s(93m) B=45.6m/s(102m) C=50m/s(111m ASL)
- FOR AREA 'D' - PLEASE CONTACT ALTRON FOR FOUNDATION SPECIFICATION

→ Modular Towers & Columns Foundation & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES I ²	BASE PLATE SIZE H ²	SERVICE ENTRY SIZE	SERVICE C ENTRY OFFSET (BP MODELS)	HOLDING DOWN BOLT SIZE D x L	FOUNDATION SIZES FOR THE UK								
							COUNTRY LOCATION			TOWN LOCATION					
							AREA A	AREA B	AREA C	AREA A	AREA B	AREA C			
ACC-FB - Fixed Base columns															
ACC1/FB	4.5	350	405	90x90		M16x245	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
ACC2/FB	6	450	510	110x110		M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
ACC2/FB/HD	6	450	510	140x140		M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6				
ACC3/FB	7.5	450	510	140x140		M20x325	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
ACC3/FB/HD	7.5	550	630	180x180		M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
ACC4/FB	9	550	630	140x140		M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
ACC4/FB/HD	9	550	630	180x180		M24x425	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9				
ACC-BP(PM) - Base Post (Post Mounted) columns															
ACC1/BP	4.5	450	510	110x110	90	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
ACC2/BP	6	450	510	110x110	90	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
ACC2/BP/HD	6	450	510	110x110	90	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6				
ACC3BP	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
ACC3BP/HD	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
ACC4/BP	9	550	630	140x140	105	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
ACC4/BP/HD	10	700	800	180x180	150	M27x600	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9				
ACC12/BP	12	700	800	180x180	150	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 0.9	1.9 x 1.9 x 0.9	1.9 x 1.9 x 0.9
ACC15/BP	15	700	800	180x180	150	M27x600	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.2 x 2.2 x 1.1	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0				
ACT-BP-PM-FB- standard towers (HD bolts not used on FB towers)															
ACT1	4.5	450	510	110x110	90	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ACT2	6	450	510	110x110	90	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ACT3	7.5	450	510	110x110	90	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ACT3/HD	7.5	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
ACT4/HD	9	550	630	140x140	105	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
ACT12	12	550	630	160x160	105	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
ACT14/BP/PM	14	700	800	230x230	150	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.4 x 1.4 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8			
ANCT - Nested towers															
ANCT/4	4	420	570	370x250		M24x425	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ANCT/6	6	420	570	370x250		M24x425	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6				
ANCT/8	8	420	570	370x250		M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
ANCT/10	10	420	570	370x250		M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1697 - cabinet based tilt-down columns															
AW1697/4.5	4.5m	450	510	430x280		M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
AW1697/6	6m	450	510	430x280		M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1697/6HD	6m	450	510	430x280		M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6				
AW1697/7.5	7.5m	550	630	430x280		M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1697/7.5HD	7.5m	550	630	430x280		M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1697/9	9m	550	630	430x280		M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
AW1697/9HD	10m	700	800	430x280		M27x600	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9				
AW1697/12	12m	700	800	430x280		M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 0.9	1.9 x 1.9 x 0.9	1.9 x 1.9 x 0.9
AW1697/15	15m	700	800	430x280		M27x600	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.2 x 2.2 x 1.1	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0				
ACC - Telescopic columns															
ACC/TEL/4	4m	350	405	90x90		M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5					
ACC/TEL/6	6m	450	510	110x110		M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
ACC/TEL/8	8m	450	510	110x110		M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65

Table dimensions in mm

Foundation sizes in table are W x W x D
Dimensions in metres

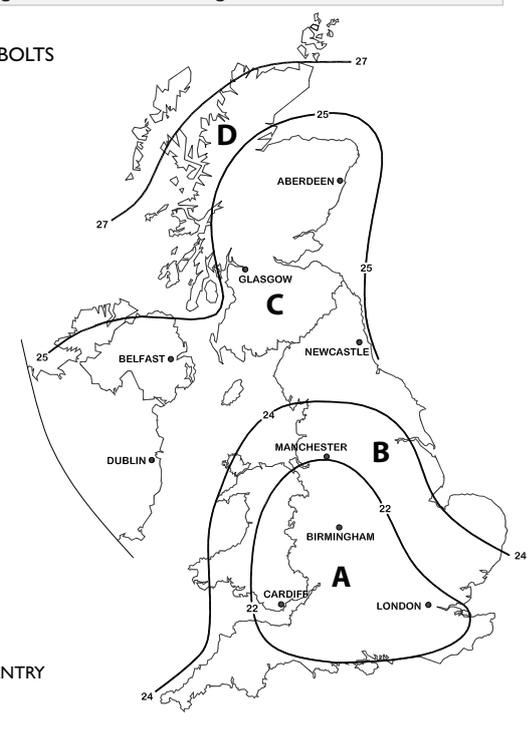
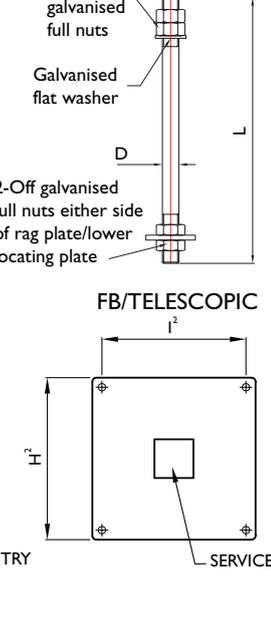
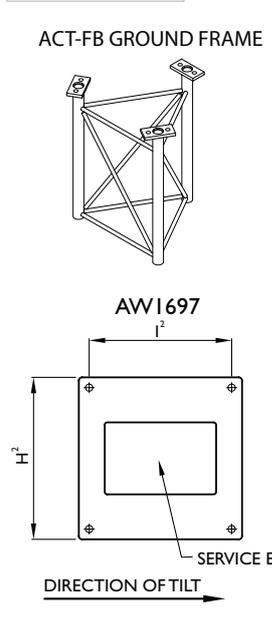
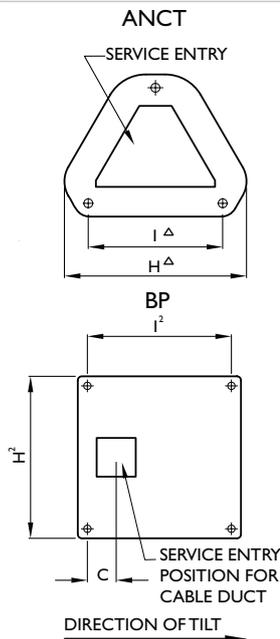
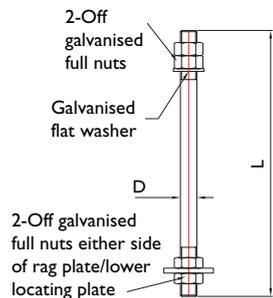


*D= 1000 on PM and buried flange/embedded base models

- For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.
- A minimum soil bearing capacity of 75 kN/m² is assumed.
- Foundation base dimensions are typical and may vary depending on site conditions.
- Please refer to the foundations & windloading section on pages 101-103 for further guidance.

REFER TO INSTALLATION METHODS ON PAGES 104-106

GALVANISED HOLDING DOWN BOLTS



Tubular Poles Fixed & Tilt Down ←



Fixed Tubular Poles



AWI502 Lamp Standard Poles



AWI859 - Tilt-Down Poles

Tubular Poles Fixed
& Tilt Down

Altron's tubular poles provide a comprehensive and versatile range of mounting solutions, suitable for public area locations.

The range comprises of fixed tubular poles, used typically for general CCTV applications; lamp standard poles that fit in with existing street furniture, but are heavy duty, designed specifically for CCTV camera mounting and can also be used for dual lighting and CCTV applications; tilt down tubular poles suitable for public areas, providing the facility to service camera equipment at ground level and tapered tubular poles, that offer an aesthetic appearance to fit in with architectural themes.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

→ Tubular Fixed Poles

Height range 3m - 12m

A comprehensive range of high specification poles, that cater for light, medium and heavy duty CCTV applications, therefore offering cost effective mounting solutions tailored to the individual installations requirements. A full range of accessories are available to ensure appropriate and high quality installations.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Schools and universities
- o Railway platforms & car parks
- o Car parks
- o Public area CCTV
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks

General Features

- o Available in 3 duties; light, medium and heavy duty to accommodate all types of camera installations
- o Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW1581/6



AW2207/8

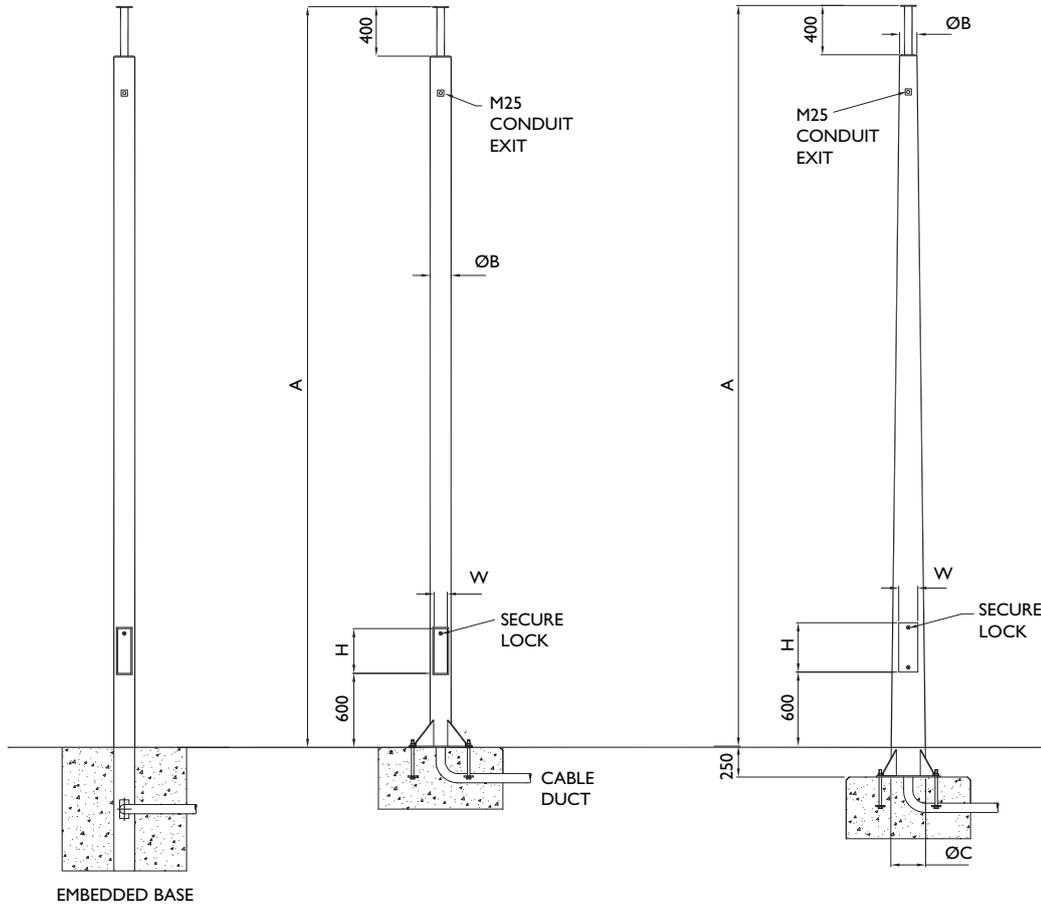


AW1592/6 in stainless steel

Tubular Fixed Poles ← Technical Specification

Tubular Poles

AW2207 Tapered Poles



Options	PT No.
Access cover plate and cable restraining bar	/AC
Decorative banding	/B
High security locks	/HS
Screw in swan neck adaptor	/SN
Tamper switch	/TS
Double Door	/DD
Lighting spigot	/LS

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD.
Ø 40 thro' column spacer

Poles complete with treated equipment mounting board inside compartment. Earthing lugs within pole and on door

FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 29

Tubular Poles Fixed & Tilt Down

Model No.	Height in mtrs	Max equip weight at pole top kgs	Max equip surface area m ²	Pole ØB	Door aperture size H x W	Pole weight kgs
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TUBULAR FIXED POLES

Light duty - Typically for fixed camera and small dome installations

AW1755/3	3	25	0.25	114	312 x 76	52
AW1755/4	4	25	0.25	114	312 x 76	63
AW1592/5	5	25	0.25	139	312 x 76	113
AW1592/6	6	25	0.25	139	312 x 76	131
AW1507/7	7	25	0.25	168	362 x 106	176
AW1507/8	8	25	0.25	168	362 x 106	208
AW1581/9	9	25	0.25	193	362 x 126	265
AW1581/10	10	25	0.25	193	362 x 126	290

Medium duty - Typically for light PTZ and larger dome installations

AW1592/3	3	35	0.4	139	312 x 76	77
AW1592/4	4	35	0.4	139	312 x 76	95
AW1507/5	5	35	0.4	168	362 x 106	132
AW1507/6	6	35	0.4	168	362 x 106	154
AW1581/7	7	35	0.4	193	362 x 126	215
AW1581/8	8	35	0.4	193	362 x 126	240
AW1576/9	9	35	0.4	219	362 x 126	293
AW1576/10	10	35	0.4	219	362 x 126	376

Heavy duty - Typically for large fully functional PTZ, offset camera loads where min deflection is required

AW1507/4	4	50	0.5	168	362 x 106	110
AW1581/5	5	50	0.5	193	362 x 126	165
AW1581/6	6	50	0.5	193	362 x 126	190
AW1576/7	7	50	0.5	219	362 x 126	235
AW1576/8	8	50	0.5	219	362 x 126	264
AW1631/9	9	50	0.5	273	462 x 126	418
AW1631/10	10	50	0.5	273	462 x 126	461
AW1631/12	12	50	0.5	273	462 x 126	547

TUBULAR TAPERED FIXED POLES - giving aesthetic appearance, and good rigidity

Model No.	Height in metres	Max equip weight at pole top kgs	Max equip surface area m ²	Pole Top ØB	Pole Bottom ØC	Door aperture size H x W	Pole weight kgs
AW2207/4	4	35	0.4	114	187	360 x 115	93
AW2207/5	5	35	0.4	114	198	360 x 135	124
AW2207/6	6	35	0.4	140	249	360 x 140	174
AW2207/7	7	35	0.4	140	267	360 x 160	210
AW2207/8	8	35	0.4	140	285	360 x 170	251

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBC

→ AW1502 Lamp Standard Pole

Tubular Poles Fixed
& Tilt Down



AW1502/10/DD

Height range 3m - 15m

Altron lamp standard CCTV poles are a versatile, high specification range of poles, designed to look like traditional lamp posts, but are very heavy duty, specifically to give the rigidity required for CCTV camera mounting. The range is ideal for medium to heavy duty applications, including dual CCTV and lighting, where we offer a full range of accessories to support this use. There are also lighter duty (LD) models, which are more economically suited for fixed camera and light PTZ installations.

Typically used for the following types of installation

- o Public area urban CCTV
- o Highways
- o Industrial and commercial premises
- o Schools and universities
- o Railway platforms & car parks
- o Car parks
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Versatile range with many accessories for both CCTV and dual lighting use
- o Double door versions available for dual CCTV and lighting, keeping services separate
- o Enlarged door version available where additional equipment mounting capacity is required
- o Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of standard Altron accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW1502/6

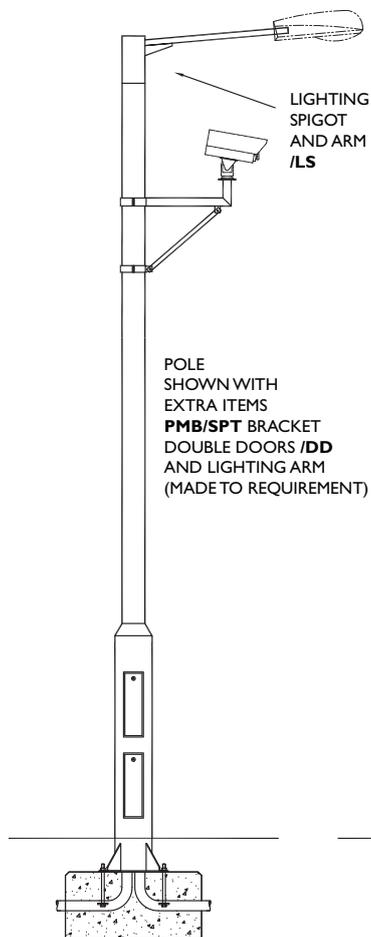


AW1502/6

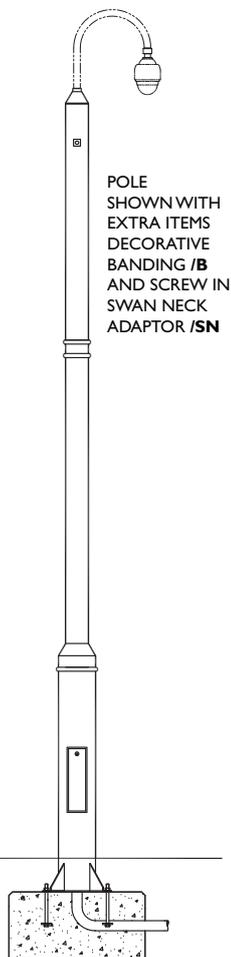
AW1502 Lamp Standard Pole ← Technical Specification

AW1502

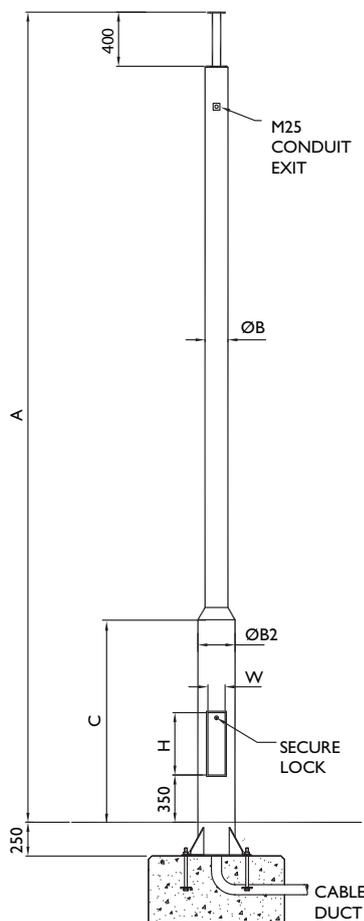
Dual Lighting/CCTV



Ornate



Standard

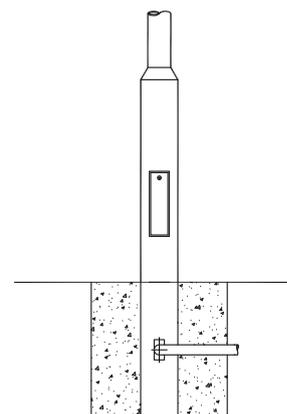


Options	PT No.
Access cover plate and cable restraining bar	/AC
Decorative banding	/B
High security locks	/HS
Screw in swan neck adaptor	/SN
Washer bottle conduit	/W
Double door	/DD
Enlarged door aperture	/ENAP
Tamper switch	/TS
Lighting spigot	/LS

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

Poles complete with treated equipment mounting board inside compartment. Earthing lugs within pole and on door

Embedded Base



FOR FOUNDATION & BOLTING DETAILS REFER TO PAGE 29

Tubular Poles Fixed & Tilt Down

Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Shaft ØB	Base ØB2	Base height C	Door aperture size H x W	Product weight kgs
AW1502/3	3	35	0.4	139	219	1100	362x126	99
AW1502/4	4	35	0.4	139	219	1100	362x126	117
AW1502/5	5	35	0.4	168	273	1500	462x126	192
AW1502/5LD	5	25	0.25	139	219	1500	362x126	135
AW1502/6	6	35	0.4	168	273	1500	462x126	214
AW1502/6LD	6	25	0.25	139	219	1500	362x126	153
AW1502/7	7	35	0.4	168	273	1500	462x126	236
AW1502/7LD	7	25	0.25	139	219	1500	362x126	171
AW1502/8LD	8	25	0.25	168	273	1500	462x126	258
AW1502/8	8	35	0.4	219	323	1900	425x177	353
AW1502/9	9	35	0.4	219	323	1900	425x177	382
AW1502/10	10	35	0.4	219	323	1900	425x177	453
AW1502/10HD	10	50	0.5	273	355	1900	425x177	614
AW1502/11	11	35	0.4	273	355	1900	425x177	657
AW1502/12	12	35	0.4	273	355	1900	425x177	700
AW1502/13	13	35	0.4	273	355	1900	425x177	743
AW1502/14	14	35	0.4	273	355	1900	425x177	786
AW1502/15	15	35	0.4	273	355	1900	425x177	829

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBC

→ AW1859 & AW4460 Tubular Tilt Down Poles



AW4460/4



AW1859/5

Height range 4m - 12m

The AW4460 is a light duty tilt down tubular pole more suitable for fixed camera and dome installations, whereas the AW1859 range is a heavier duty product suitable for medium to heavy PTZ applications. Both products give a neat and aesthetic appearance and are suitable for installations where the public have access, whilst enabling camera equipment to be serviced at ground level. Flush doors and secure locks make these secure products, designed for security installations. A full range of standard accessories back up this comprehensive range of tilt down poles.

Typically used for the following types of installation

- o Industrial and commercial premises
- o Perimeter detection
- o Schools and universities
- o Prisons and detention facilities
- o Railway platforms & car parks
- o Car parks
- o Public area CCTV
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks
- o Internal padlock facility to protect against un-authorized lowering
- o Can be mounted with anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Suitable for public access areas
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- o Available in bolt down and embedded/direct burial versions
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



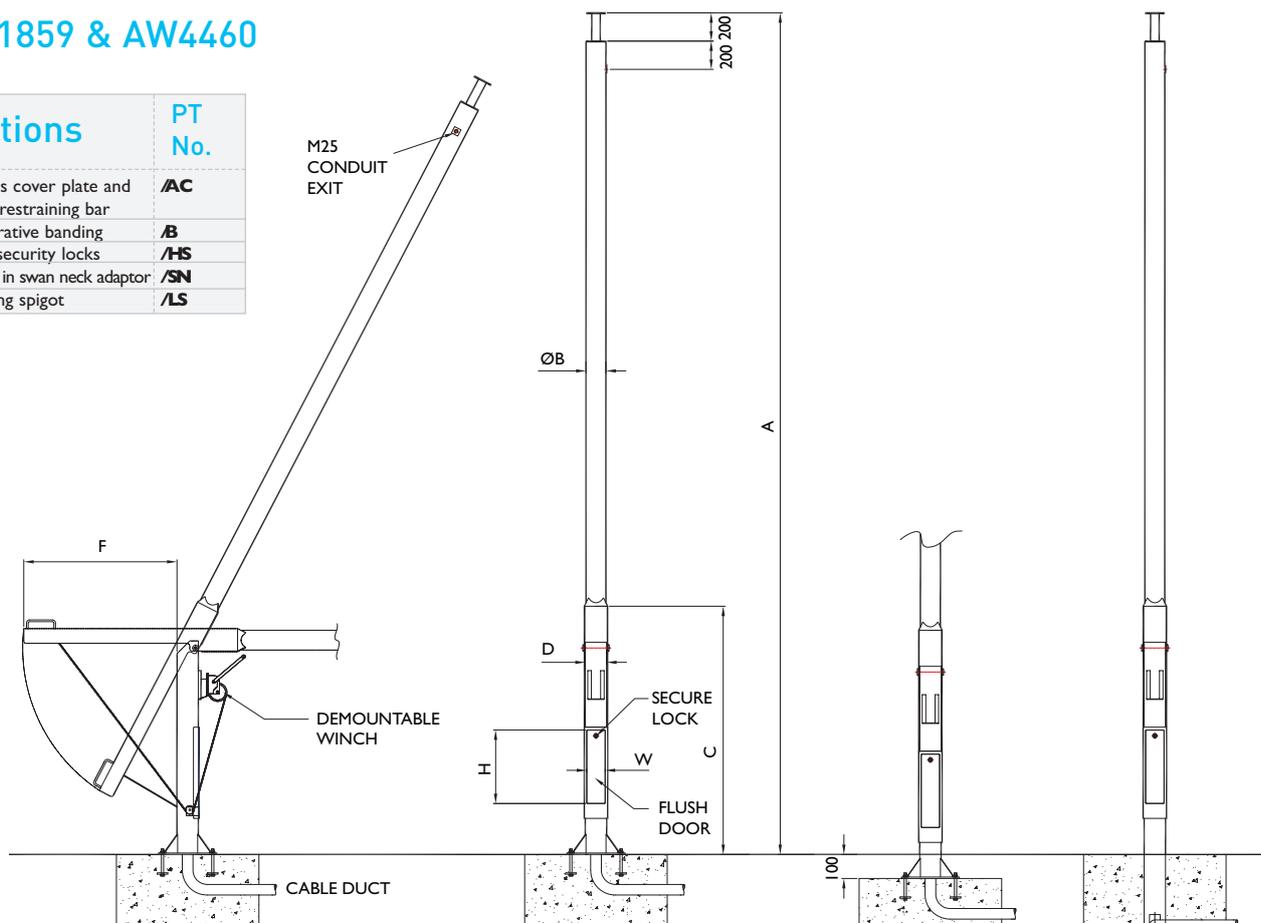
AW1859/6 in tilted position

AW1859/4460 Tubular Tilt Down Pole ← Technical Specification

AW1859 & AW4460

Options

	PT No.
Access cover plate and cable restraining bar	/AC
Decorative banding	/B
High security locks	/HS
Screw in swan neck adaptor	/SN
Lighting spigot	/LS



All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

Pole is fixed in the vertical position using 2 no. bolts and locked with internal nuts - has the facility to be padlocked internally to stop unauthorised tilting.

Poles complete with treated equipment mounting board inside compartments. Earthing lugs within pole & on door

BASEPLATE SET BELOW GROUND LEVEL

EMBEDDED BASE

FOR FOUNDATION & BOLTING DETAILS REFER TO PAGE 29

Model No.	Height in mtrs A	Max equip weight at pole top kgs	Max equip surface area m ²	Pole ØB	Post size D ²	Post height C	Pole rear clearance when tilting F	Door aperture H x W	Winch part number	Product weight kgs
AW4460 TILT-DOWN POLES - suitable for loads up to light PTZ and dual dome applications										
AW4460/4	4	25	0.25	114	150	1700	1800	500x110	DW1000/60	115
AW4460/5	5	25	0.25	114	150	1700	1800	500x110	DW1000/60	130
AW4460/6	6	25	0.25	114	150	1700	1800	500x110	DW1000/60	145
AW4460/7	7	25	0.25	139	150	2000	2200	500x110	DW1500/60	198
AW4460/8	8	25	0.25	139	150	2000	2200	500x110	DW1500/60	216
AW1859 TILT-DOWN POLES - suitable for heavier PTZ applications and for heights up to 12m										
AW1859/4	4	40	0.40	139	150	1700	1800	500x110	DW1000/59	125
AW1859/5	5	40	0.40	139	150	1700	1800	500x110	DW1000/59	147
AW1859/6	6	30	0.40	139	150	1700	1800	500x110	DW1000/59	170
AW1859/7	7	30	0.40	168	180	2000	2200	500x130	DW1500/59	253
AW1859/8	8	30	0.40	168	180	2000	2200	500x130	DW1500/59	275
AW1859/9	9	30	0.40	193	200	2700	2900	500x140	DW2500/59	401
AW1859/10	10	30	0.40	193	200	2700	2900	500x140	DW2500/59	427
AW1859/11	11	25	0.30	193	200	2700	2900	500x140	DW2500/59	453
AW1859/12	12	25	0.25	193	200	2700	2900	500x140	DW2500/59	479

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference

Single fixed camera knuckle	PTS-1
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBC

Tubular Poles Fixed & Tilt Down

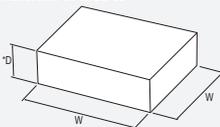
→ Tubular Poles - Fixed & Tilt-Down Foundations & Bolting Details

Tubular Poles Fixed & Tilt Down

MODEL NO.	HEIGHT MTRS	BOLT CENTRES ^{1/2}	BURIED DEPTH ^{1/2}	BASE PLATE SIZE ^{1/2}	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D x L	FOUNDATION SIZES FOR THE UK									
							COUNTRY LOCATION			TOWN LOCATION						
							AREA A	AREA B	AREA C	AREA A	AREA B	AREA C				
AW1502 - lamp standard																
AW1502/4	4m	350	250	405	200	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	
AW1502/5	5m	450	250	510	250	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1502/6	6m	450	250	510	250	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6				
AW1502/7	7m	450	250	510	250	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1502/8	8m	550	250	630	250	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
AW1502/10	10m	550	250	630	250	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	
AW1502/10HD	10m	700	250	800	300	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9				
AW1502/12	12m	700	250	800	300	M27x600	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9				
AW1502/15	15m	700	250	800	300	M27x600	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.0	2.2 x 2.2 x 1.1	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.0				
AW1859 - tubular tilt-down																
AW1859/4	4m	350	405	120	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5					
AW1859/5	5m	350	405	120	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55					
AW1859/6	6m	350	405	120	M16x245	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6					
AW1859/7	7m	450	510	150	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1859/8	8m	450	510	150	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65					
AW1859/10	10m	550	630	180	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8				
AW1859/12	12m	550	630	180	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8				
AW4460 - tubular tilt-down																
AW4460/4	4m	350	405	120	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.8 x 0.8 x 0.4	0.9 x 0.9 x 0.5						
AW4460/6	6m	350	405	120	M16x245	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55					
AW4460/8	8m	450	510	150	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6						
Tubular poles - Light Duty																
AW1755/4	4m	350	405	110	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.8 x 0.8 x 0.4	0.9 x 0.9 x 0.5						
AW1592/5	5m	350	405	110	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5				
AW1592/6	6m	350	405	110	M16x245	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1507/7	7m	450	510	150	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6					
AW1507/8	8m	450	510	150	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1581/9	9m	550	630	180	M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
AW1581/10	10m	550	630	180	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7						
Medium duty																
AW1592/4	4m	350	405	110	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5				
AW1507/5	5m	450	510	150	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1507/6	5m	450	510	150	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6					
AW1581/7	7m	450	510	180	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1581/8	8m	550	630	180	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
AW1576/9	9m	550	630	200	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75				
AW1576/10	10m	550	630	200	M24x425	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8				
Heavy duty																
AW1507/4	4m	350	405	150	M16x245	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5						
AW1581/5	5m	450	510	180	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55						
AW1581/6	6m	450	510	180	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6						
AW1576/7	7m	450	510	200	M20x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65						
AW1576/8	8m	550	630	200	M24x425	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7				
AW1631/9	9m	550	630	250	M24x425	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8				
AW1631/10	10m	550	630	250	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9				
AW1631/12	12m	550	630	250	M24x425	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0				
Tapered tubular poles																
AW2207/4	4m	350	250	405	150	M16x245	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	
AW2207/6	6m	450	250	510	200	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6				
AW2207/8	8m	450	250	510	200	M20x325	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65					

Table dimensions in mm

Foundation sizes in table are W x W x D
Dimensions in metres

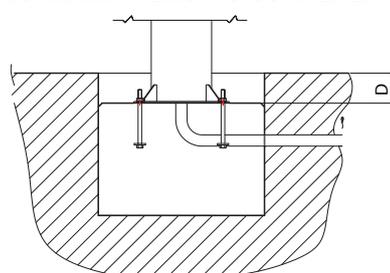


*D= 1000 on PM and buried flange/embedded base models

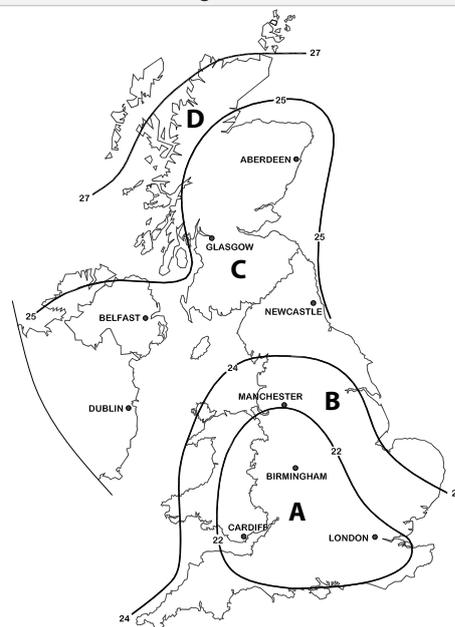
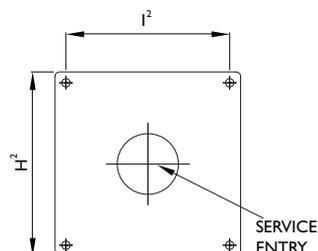
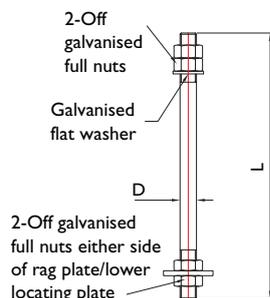
REFER TO
INSTALLATION
METHODS ON
PAGES 104 - 106

- For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.
- A minimum soil bearing capacity of 75 kN/m² is assumed.
- Foundation base dimensions are typical and may vary depending on site conditions.
- Please refer to the foundations & windloading section on pages 101-103 for further guidance.

BURIED DEPTH BELOW GROUND LEVEL



GALVANISED HOLDING DOWN BOLTS



Cabinet Based Poles ←

Altron Cabinet Based Poles are versatile and robust with the facility for 2 or more compartments therefore making them ideal for multiple use installations - such as CCTV and traffic light mounting.



AW1545/6/DD/UP with gold banding



AW1545/6/DD/UP with gold banding



AW1545/6/300/DD/UP with banding and screw in swan neck

→ Cabinet Based Poles Gallery



AW1545/5/TD/UP



AW1545/8/UP



AW1545/8/UP



AW1545/6/UP in stainless steel

Cabinet Based Poles



AW2075



AW1545/BAS



AW1545/UP

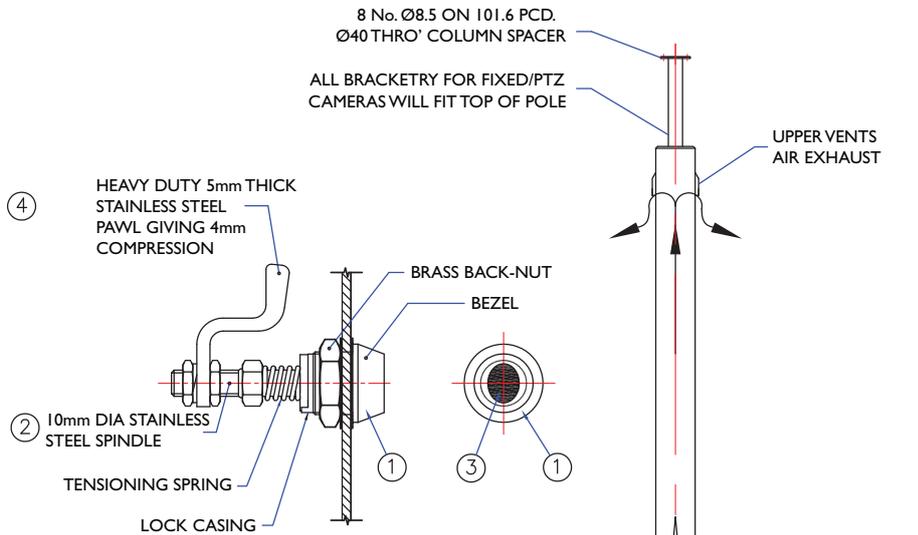
Altron AW1545 cabinet based camera poles were originally introduced in 1994 as the first CCTV cabinet based pole product. They have been used and specified extensively since then and are now a common feature in urban areas throughout the UK. Ideal for mounting camera equipment within, they provide a cost effective installation and reduce street furniture and clutter. The tilt-down range enables camera equipment to be serviced easily at ground level, without the need for a man lift. Recent developments have been aimed at producing a clean and aesthetic outline, whilst enhancing security, so close fitting flush doors and our heavy duty secure locks are now common across the range.

The AW2075 Cylindrical cabinet based version, with parallel or tapered shafts are popular for installations with an architectural theme.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

→ Features of Urban Highway Poles

These Features in Equipment & Construction are Common Across the AW1545 Range

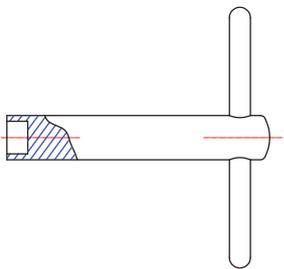


CONVECTION VENTING
Air within pole is warmed - either by equipment within pole or by solar gain - warm air rises up pole & draws cool air through lower vents - this cools equipment and limits condensation.

SPECIAL GRADE WELDING WIRE
When seam welding with standard welding wire after grinding flush a build up of galvanising occurs on the weld seam in the galvanising process known as weld growth. To stop this unsightly seam or the need to dress down (sometimes this dressing goes through the galvanising to bare metal) Altron uses a special grade of wire which does not cause weld growth, therefore improving the galvanising finish.

ALTRON SECURE LOCK FEATURES

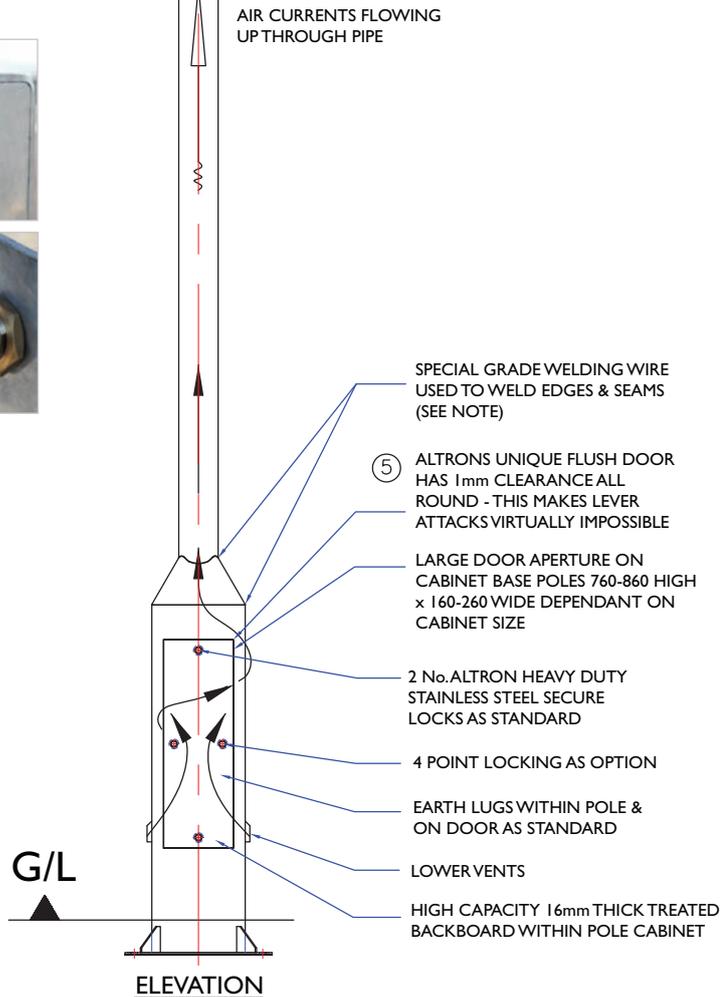
- 1 - Casing produced from stainless steel bar - cannot be sheared across face.
- 2 - Spindle made from stainless steel with positive shoulder - means it cannot be driven through casing.
- 3 - Close fitting key on oval centre pin means lock cannot be picked or operated with anything other than the correct key.
- 4 - Heavy duty latch resists lever attacks.
- 5 - Flush door with 1mm clearance resists lever attacks.



HEAVY DUTY 'T' HANDLE KEY

FOR FURTHER DETAILS ON THE ALTRON LOCK SEE DATA SHEET ASL/41/04

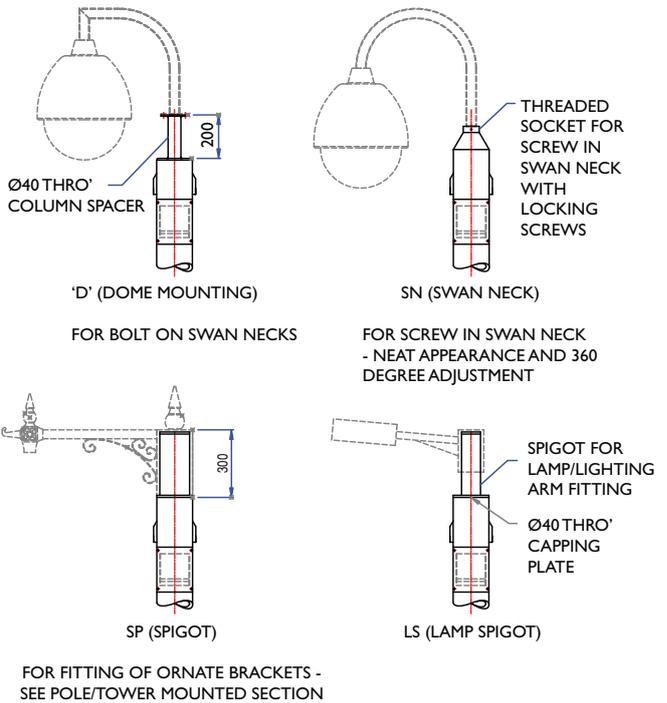
FOR THE FULL RANGE OF DOOR & LOCK OPTIONS SEE DATA SHEET UDL/41/04



Options of Urban Highway Poles ←

HEAD OPTIONS

AVAILABLE FOR 02 | 45 | 45TD | 75 | 75TD



8 NO. Ø8.5 ON 101.6 PCD.
Ø40 THRO' COLUMN SPACER

ALL BRACKETRY FOR FIXED/PTZ
CAMERAS WILL FIT TOP OF POLE

CABLE RESTRAINT
BAR & ACCESS COVER

COVER SHOWN REMOVED

UPPER (EXHAUST) VENTS

NICKEL PLATED
BRASS CONDUIT
ELBOW M25/M32

CABLE OUTLET
Ø25 AS STANDARD

OPTIONS
2X25 THREADED
1X32 THREADED

02 | 45 | 45TD | 75 | 75TD

02 | 45 | 45TD | 75 | 75TD

ORNATE FEATURES
BANDING AS SHOWN
CAST EMBELLISHMENTS
400MM SQUARE CABINET = ENEK
500MM SQUARE CABINET = TNEK/ENEK
SEE ORNATE POLE SECTION

CLAMP ON BRACKETRY FOR
CAMERAS FIXED/PTZ LIGHTING/
PIR'S/SIGNAGE

02 | 45 | 45TD | 75 | 75TD

SEE POLE/TOWER MOUNTED SECTION

SPIKED ANTI-CLIMB GUARDS. ANTI CLIMB PAINT

02 | 45 | 45TD | 75 | 75TD

PAINT FINISHES OVER GALVANISING UP TO
PRIMER TO COATS IN BS/RAL NO'S

(ALL POLE TYPES)

WASHER CONDUIT INTERNAL
WITH SEPARATE DOOR
FOR WASHER BOTTLE

45

LOCK OPTIONS

2 NO. ALTRON SECURE
LOCKS AS STANDARD

UNIQUELY CODED
SECURITY LOCK TO GIVE
POLE/SITE EXCLUSIVE SECURITY

4 POINT ALTRON SECURE LOCKING
THE ALTRON SECURE LOCK
CAN BE PROVIDED AS A FLUSH
MOUNTED OPTION

AVAILABLE ON ALL POLES

45 | 45LTH | 75TD HINGED DOOR

G/L

BAFFLE & CIRCULATING FAN

45 | 45TD | 75 | 75TD

HEATER OPTIONS

ON ALL POLES

CABINET OPTIONS

EARTH LUGS WITHIN POLE & ON DOOR AS STANDARD

VENTING AS STANDARD (IP55)

45 | 45LTH | 45TD | 75 | 75TD

DUST FILTERS FOR WITHIN POLE

CABINET IP RATING TO IP65

45 | 45LTH | 45TD | 75 | 75TD

300² | 45

350² | 45

400² | 45 | 45TD | 45LTH

450² | 45

500² | 45 | 45TD | 45LTH

600² | 45

19" RACK MOUNTING OPTION ON THIS CABINET SIZE

SECOND FULL SIZE DOOR

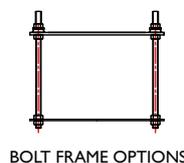
02 | 45 | 45LTH | 75

'HOLDING DOWN' OPTIONS

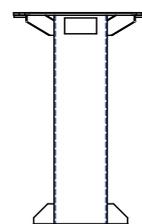
BOLT FRAME OPTIONS IN LIEU OF
STANDARD ANCHOR BOLTS & TEMPLATE
CHEMICAL FIXINGS

BURIED FLANGE FOR EMBEDDED BASE OPTION

REFER TO BASE INSTALLATION
METHODS FOR FURTHER DETAILS



BOLT FRAME OPTIONS



BURIED FLANGE FOR
EMBEDDED BASE OPTION

KEY FOR POLE TYPE ABBREVIATIONS

02 = AW1502

02LTH = AW1502/LTH

45 = AW1545

45LTH = AW1545/LTH

45TD = AW1545/TD

75 = AW2075

75TD = AW2075/TD

→ AW1545/UP Cabinet Based Pole



AW1545/12/UP

Fixed height range 4m - 15m
Tilt Down height range 4m - 12m

Designed to meet the specific demands of urban area CCTV, our range of high specification cabinet based poles come as standard with venting, high security locks and high capacity, good quality, treated back boards. With many cabinet sizes, door options and head mounting options, backed up with a full range of accessories, the AW1545 UP pole range offers a comprehensive solution for urban CCTV installations.

Typically used for the following types of installation

- o Public area urban CCTV
- o Highways
- o Industrial and commercial premises
- o Schools and universities
- o Prisons and detention facilities
- o Utilities sites
- o Railway platforms & car parks
- o Car parks
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Internal padlock facility on tilt down poles to protect against un-authorized lowering
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Available in 6 standard cabinet sizes, 300, 350, 400, 450, 500 and 600 square (400mm square as standard if not specified)
- o Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure locks and a high security lock giving enhanced security and a clean aesthetic appearance
- o 4 point security door locking option
- o Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- o Baffle vents to IP55 available as option
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



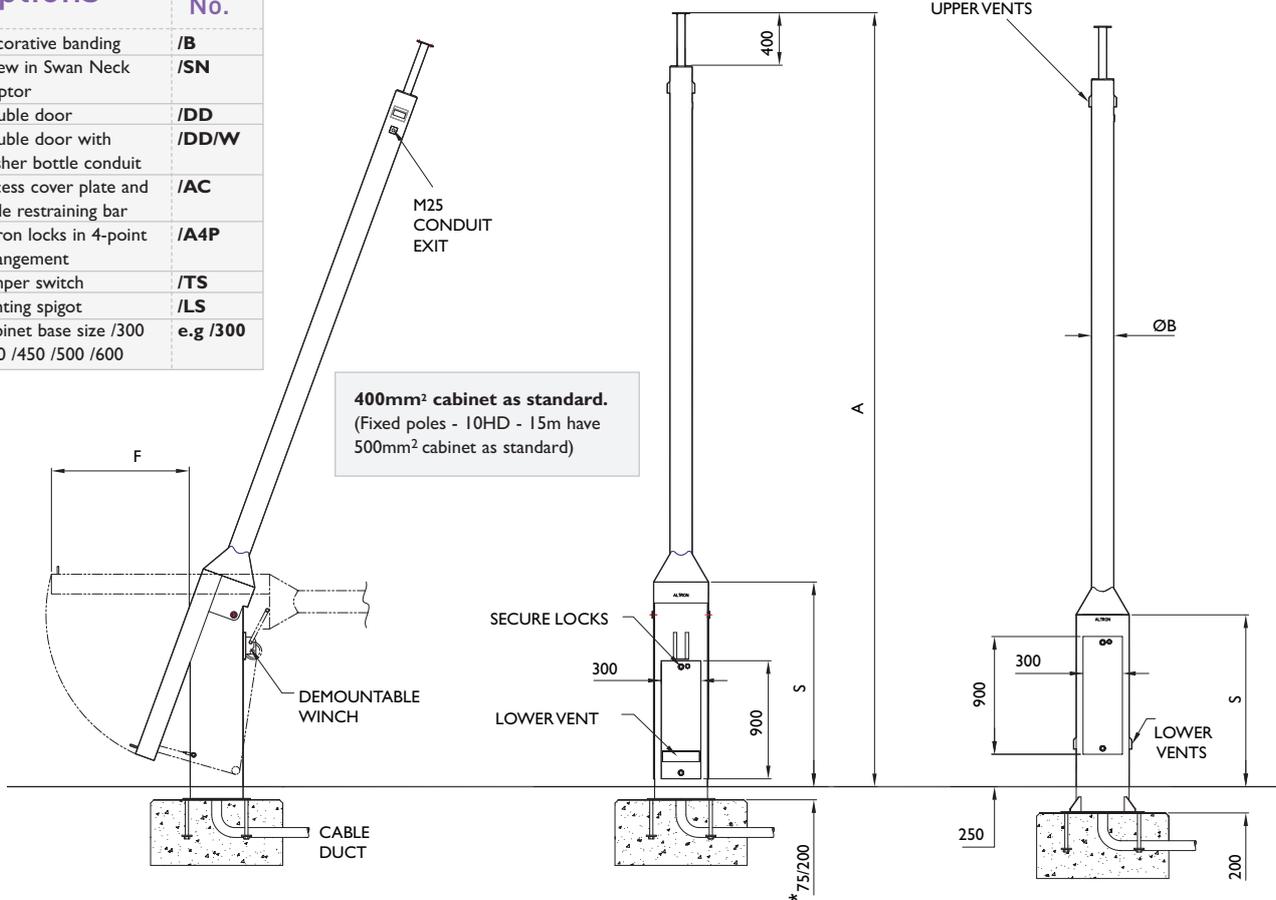
AW1545/6TD/UP in tilted position

→ AW1545/UP Cabinet Based Pole Technical Specification

Options	PT No.
Decorative banding	/B
Screw in Swan Neck adaptor	/SN
Double door	/DD
Double door with washer bottle conduit	/DD/W
Access cover plate and cable restraining bar	/AC
Altron locks in 4-point arrangement	/A4P
Tamper switch	/TS
Lighting spigot	/LS
Cabinet base size /300 /350 /450 /500 /600	e.g /300

AW1545UP TD

AW1545UP



Pole is fixed in the vertical position using 2 no. bolts and locked with internal nuts - has the facility to be padlocked internally to stop unauthorised tilting.

Poles complete with treated equipment mounting board inside compartment. Earthing lugs within pole & on door

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

* 4-8m Tilt Down Units baseplate buried 75mm below ground level
* 10-12m Tilt Down Units baseplate buried 200mm below ground level

FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 41

Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Pole ØB	Cabinet height above ground S	Pole rear clearance when tilting F	Winch part number	Product weight kgs
AW1545UP-Fixed								
AW1545/4/UP	4	40	0.25	168	1300	-	-	216
AW1545/5/UP	5	40	0.25	168	1300	-	-	238
AW1545/6/UP	6	40	0.25	168	1300	-	-	260
AW1545/7/UP	7	40	0.25	168	1300	-	-	292
AW1545/8/UP	8	40	0.25	168	1300	-	-	314
AW1545/8HD/UP	8	40	0.25	219	1300	-	-	350
AW1545/9/UP	9	40	0.25	219	1650	-	-	425
AW1545/10/UP	10	40	0.25	219	1650	-	-	496
AW1545/10HD/UP	10	40	0.25	273	1650	-	-	780
AW1545/12/UP	12	40	0.25	273	1650	-	-	866
AW1545/15/UP	15	40	0.25	273	1650	-	-	995
AW1545UP TD-Tilt Down								
AW1545/4TD/UP	4	40	0.25	168	1625	1150	DW1000/45	246
AW1545/6TD/UP	6	30	0.25	168	1625	1150	DW1000/45	290
AW1545/8TD/UP	8	25	0.25	168	1625	1150	DW1500/45	335
AW1545/10TD/UP	10	25	0.25	219	2650	2150	DW2500/45	668
AW1545/12TD/UP	12	25	0.25	219	2650	2150	DW2500/45	726

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories	
Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference	
Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBP

→ AW1545/BAS Cabinet Based Pole



AW1545/8/BAS

Fixed height range 4m - 12m
Tilt Down height range 4m - 12m

The 'basic' AW1545 BAS cabinet based pole range offers a cost effective means of mounting CCTV equipment within the one pole structure. More commonly used for industrial and commercial type installations, it does not have venting and high security locks, that come as standard on the UP range, but does offer the other security features common to our cabinet based poles and also the clean, aesthetic appearance, common to the AW1545 ranges and is backed up with a full range of accessories.

Typically used for the following types of installation

- Public area CCTV
- Industrial and commercial premises
- Schools and universities
- Prisons and detention facilities
- Utilities sites
- Railway platforms & car parks
- Car parks
- Retail Parks
- Sports stadia

Security Features

- Internal cabling
- Close fitting flush doors
- Solid secure heavy duty door locks
- Internal padlock facility on tilt down poles to protect against un-authorized lowering

General Features

- Stable structures for all camera types
- Available in 6 standard cabinet sizes, 300, 350, 400, 450, 500 and 600 square (350mm square as standard if not specified)
- Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure locks giving enhanced security and a clean aesthetic appearance
- Treated wooden backboard within cabinet
- 4 point security door locking option
- Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- A wide range of standard Altron Accessories and Brackets available
- Pole adaptations available to suit customers/project specific requirements
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- For design, manufacturing and finishing standards, see details on page 107



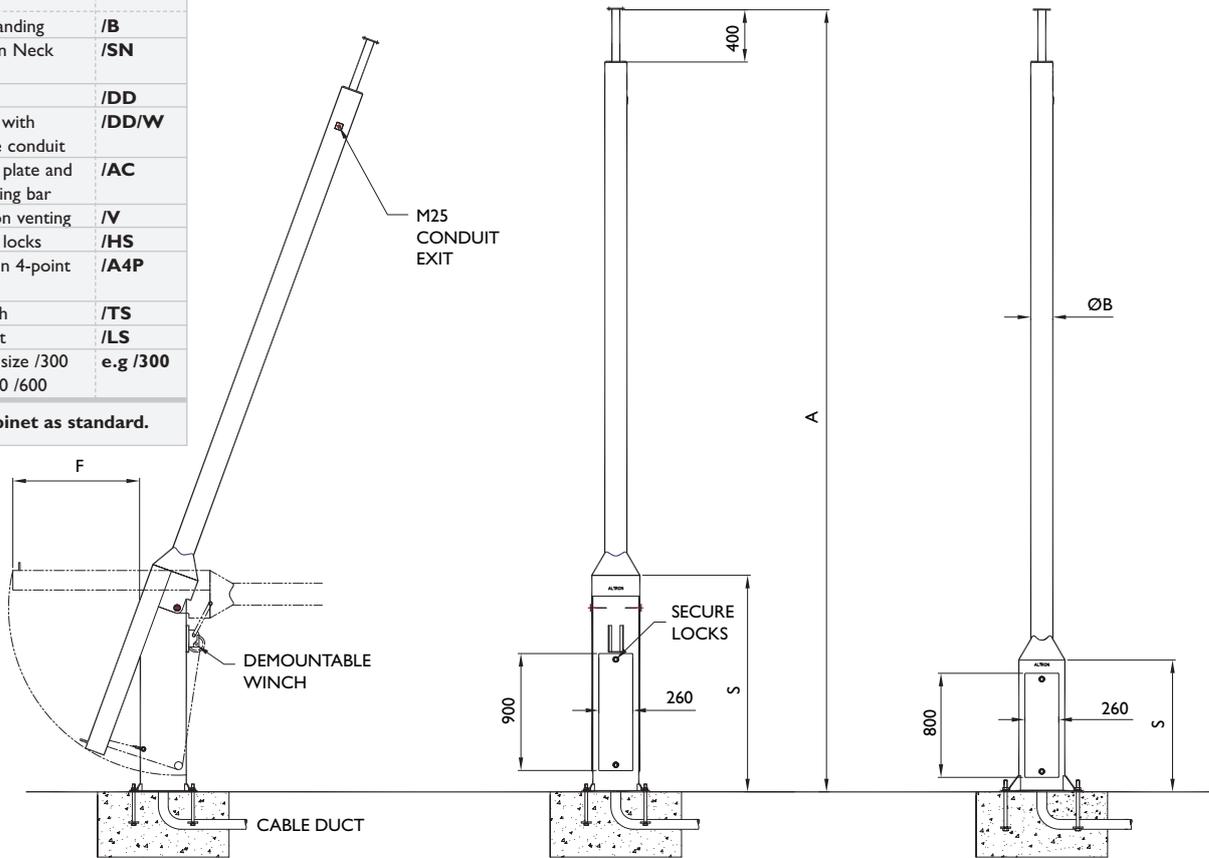
AW1545/6TD/BAS in tilted position

AW1545/BAS Cabinet Based Pole Technical Specification ←

Options	PT No.
Decorative banding	/B
Screw in Swan Neck adaptor	/SN
Double door	/DD
Double door with washer bottle conduit	/DD/W
Access cover plate and cable restraining bar	/AC
Full convection venting	/V
High security locks	/HS
Altron locks in 4-point arrangement	/A4P
Tamper switch	/TS
Lighting spigot	/LS
Cabinet base size /300 /400 /450 /500 /600	e.g /300
350mm² cabinet as standard.	

AW1545BAS TD

AW1545BAS



Pole is fixed in the vertical position using 2 no. bolts and locked with internal nuts - has the facility to be padlocked internally to stop unauthorised tilting.

Poles complete with treated equipment mounting board inside compartment. Earthing lugs within pole & on door

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 41

Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Pole ØB	Cabinet height above ground S	Pole rear clearance when tilting F	Winch part number	Product weight kgs
AW1545BAS-Fixed								
AW1545/4/BAS	4	40	0.25	168	1000	-	-	153
AW1545/5/BAS	5	40	0.25	168	1000	-	-	175
AW1545/6/BAS	6	40	0.25	168	1000	-	-	197
AW1545/7/BAS	7	40	0.25	168	1000	-	-	219
AW1545/8/BAS	8	40	0.25	168	1000	-	-	251
AW1545/8HD/BAS	8	40	0.25	193	1000	-	-	341
AW1545/9/BAS	9	40	0.25	193	1300	-	-	371
AW1545/10/BAS	10	40	0.25	193	1300	-	-	401
AW1545/12/BAS	12	40	0.25	193	1300	-	-	462
AW1545BAS TD-Tilt Down								
AW1545/4TD/BAS	4	40	0.25	168	1700	1100	DW1000/45	236
AW1545/6TD/BAS	6	30	0.25	168	1700	1100	DW1000/45	280
AW1545/8TD/BAS	8	25	0.25	168	1700	1100	DW1500/45	334
AW1545/10TD/BAS	10	25	0.25	193	2850	2150	DW2500/45	592
AW1545/12TD/BAS	12	25	0.25	193	2850	2150	DW2500/45	643

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference

Single fixed camera knuckle	PTS-I
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBP

→ AW2075 Cabinet Based Pole

Fixed height range 4m - 10m
Tilt Down height range 4m - 10m

An architectural range of high specification cabinet based poles based on the AW1545 UP pole specification, but with a cylindrical cabinet and either a parallel or tapered pole shaft. These poles come as standard with venting, high security locks and high capacity, good quality, treated back boards.

Typically used for the following types of installation

- o Public area urban CCTV
- o Retail Parks
- o To fit in with other architectural tapered street furniture
- o Sports stadia

Security Features

- o Internal cabling
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Additional security measures available
- o Internal padlock facility on tilt down poles to protect against un-authorized lowering
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o 4 point security door locking option
- o Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- o Baffle vents to IP55 available as option
- o Demountable winches allow for a secure installation whilst also reducing costs on multiple installations
- o A wide range of standard Altron Accessories and Brackets available
- o Pole adaptations available to suit customers/project specific requirements
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o Also available in 316 stainless steel, architectural finish
- o For design, manufacturing and finishing standards, see details on page 107



AW2075/6



AW2075/6 with ornate finial



AW2075/8

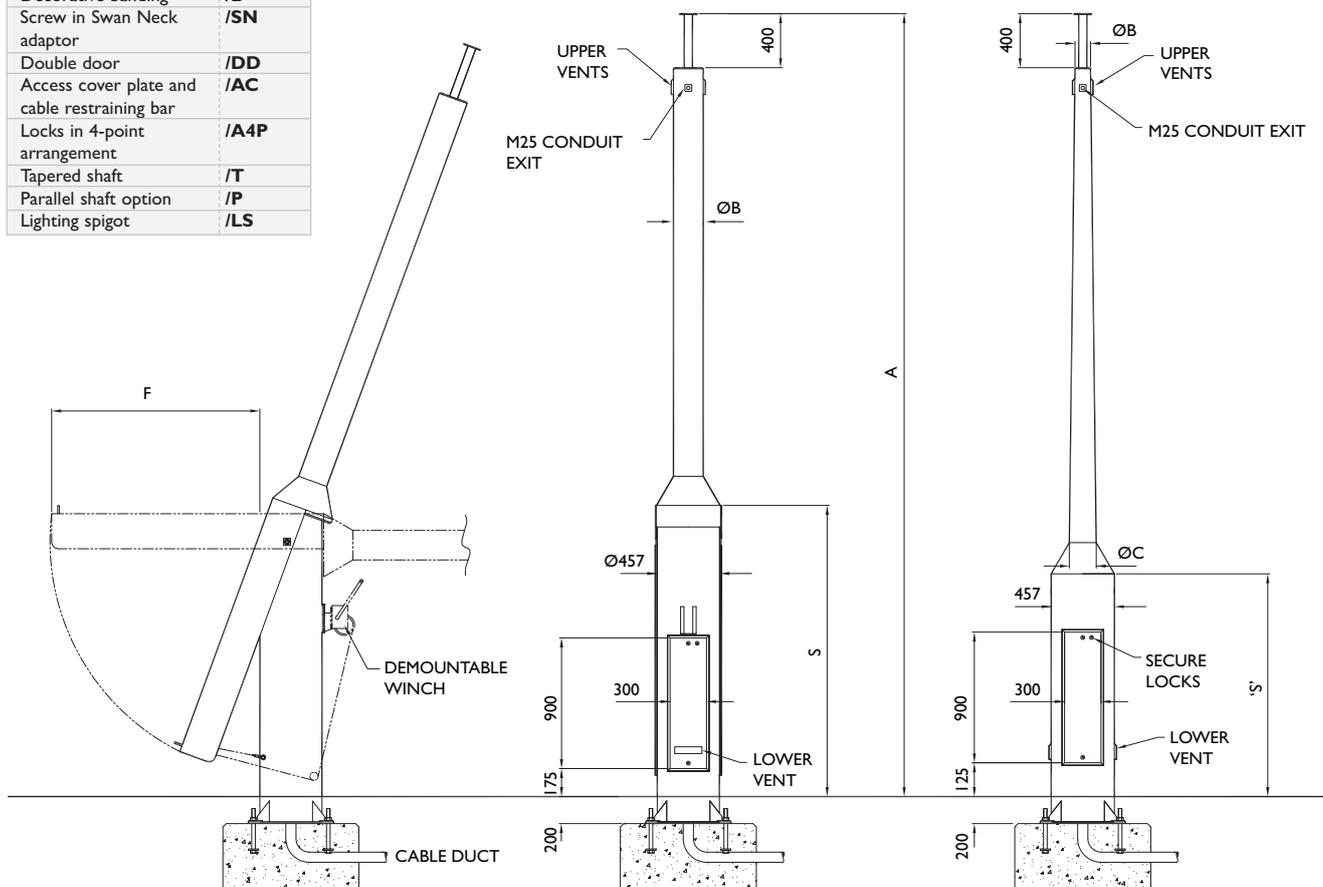
AW2075 Cabinet Based Pole Technical Specification ←

Options	PT No.
Decorative banding	/B
Screw in Swan Neck adaptor	/SN
Double door	/DD
Access cover plate and cable restraining bar	/AC
Locks in 4-point arrangement	/A4P
Tapered shaft	/T
Parallel shaft option	/P
Lighting spigot	/LS

The AW2075 range can be supplied with either a parallel or tapered shaft

AW2075TD

AW2075



Pole is fixed in the vertical position using 2 no. bolts and locked with internal nuts - has the facility to be padlocked internally to stop unauthorised tilting.

Poles complete with treated equipment mounting board inside compartment. Earthing lugs within pole & on door

All camera mounting plates are Ø 127 with 8 No Ø 8.5 equi-spaced on 101.6 PCD. Ø 40 thro' column spacer

FOR BASE DETAILS REFER TO PAGE 41

Model No.	Height in mtrs A	Max equip weight at pole top kgs	Max equip surface area m ²	Parallel shaft ØB	Tapered shaft bottom ØC	Tapered shaft Top ØB	Cabinet height above ground S	Pole rear clearance when tilting F	Winch part number	Product weight kgs
AW2075-Fixed										
AW2075/4	4	40	0.25	168	153	114	1200	-	-	208
AW2075/5	5	40	0.25	168	171	114	1200	-	-	230
AW2075/6	6	40	0.25	168	189	114	1200	-	-	252
AW2075/7	7	40	0.25	168	230	140	1200	-	-	274
AW2075/8	8	40	0.25	219	248	140	1650	-	-	318
AW2075/9	9	40	0.25	219	266	140	1650	-	-	364
AW2075/10	10	40	0.25	219	284	140	1650	-	-	410
AW2075 TD-Tilt down										
AW2075/4TD	4	40	0.25	168	144	114	1800	1350	DW1000/75	362
AW2075/6TD	6	30	0.25	168	180	114	1800	1350	DW1000/75	402
AW2075/8TD	8	25	0.25	219	239	140	1800	1350	DW1500/75	478
AW2075/10TD	10	25	0.25	219	275	140	2150	2150	DW2500/75	581

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

Accessories

Top mounting brackets for Fixed and PTZ cameras	P76
Swanneck brackets for Dome cameras	P81
Anti-climb guards	P77
Clamp-on camera mounting brackets	P79
Telemetry box mounting brackets	P77
Pole top mounting cages	P83
PIR mounting ring	P84

Quick reference

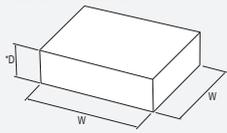
Single fixed camera knuckle	PTS-1
Twin fixed camera bracket	TB2-600F
Half swanneck for dome	AW1699H
Full swanneck for dome	AW1699F
Anti climb guard	SGC
PIR mounting ring	AW1962
Telemetry bracket	ATBP

→ Cabinet Based Poles Foundations & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES ¹ ±	BASE PLATE SIZE ² H ² x L ²	BURIED DEPTH ³ D ³	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D X L	FOUNDATION SIZES FOR THE UK								
							COUNTRY LOCATION			TOWN LOCATION					
							AREA A	AREA B	AREA C	AREA A	AREA B	AREA C			
AW1545/UP Fixed cabinet based pole. Standard cabinet base size of 400mm ²															
AW1545/4	4	550	630	200	370x370	M24x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5					
AW1545/5	5	550	630	200	370x370	M24x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5				
AW1545/6	6	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1545/7	7	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
AW1545/8	8	550	630	200	370x370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1545/8/HD	8	550	630	200	370x370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1545/9	9	550	630	200	370x370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1545/10	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/10/HD	10	700	800	200	470x470	M27x600	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/12	12	700	800	200	470x470	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9
AW1545/15	15	700	800	200	470x470	M27x600	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.0	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0
AW1545/UP/TD Tilt-down cabinet based pole. Standard cabinet base size of 400mm ²															
AW1545/4TD	4	550	630	75	370x370	M24x325	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
AW1545/6TD	6	550	630	75	370x370	M24x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
AW1545/8TD	8	550	630	75	370x370	M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1545/10TD	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/12TD	12	550	630	200	370x370	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9
AW1545/BAS Fixed cabinet based pole. Standard cabinet base size of 350mm ²															
AW1545/4	4	450	510	N/A	330x330	M20x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5					
AW1545/5	5	450	510	N/A	330x330	M20x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5				
AW1545/6	6	450	510	N/A	330x330	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1545/7	7	550	630	N/A	330x330	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
AW1545/8	8	550	630	N/A	330x330	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1545/9	9	550	630	N/A	330x330	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1545/10	10	550	630	N/A	330x330	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/12	12	550	630	N/A	330x330	M24x425	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.4 x 1.4 x 0.7	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9
AW1545/BAS/TD Tilt-down cabinet based pole. Standard cabinet base size of 350mm ²															
AW1545/4TD	4	450	510	75	330x330	M20x325	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5
AW1545/6TD	6	450	510	75	330x330	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
AW1545/8TD	8	550	630	75	330x330	M24x425	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65				
AW1545/10TD	10	550	630	200	330x330	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/12TD	12	550	630	200	330x330	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8
AW2075 - AW2075/TD both fixed and tilt-down poles have a Ø457mm cabinet base only.															
AW2075/4	4	450	510	200	Ø420	M20x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5					
AW2075/6	6	450	510	200	Ø420	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW2075/8	8	550	630	200	Ø420	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW2075/10	10	550	630	200	Ø420	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75

Table dimensions in mm

Foundation sizes in table are W x W x D
Dimensions in metres



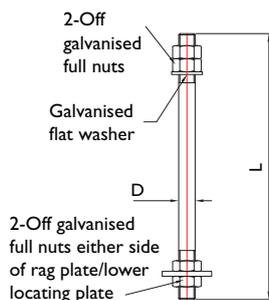
*D= 1000 on PM and buried flange/embedded base models

Base plate and bolt sizes are for the standard cabinet sizes shown. For other cabinet sizes please contact our technical department for confirmation of sizes.

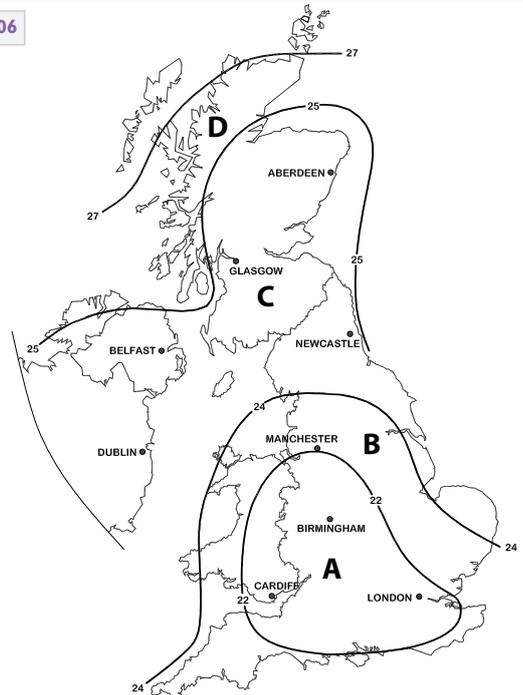
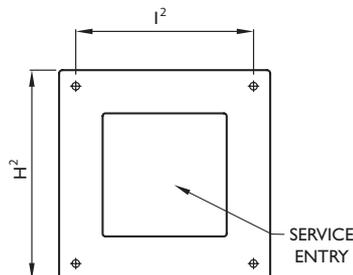
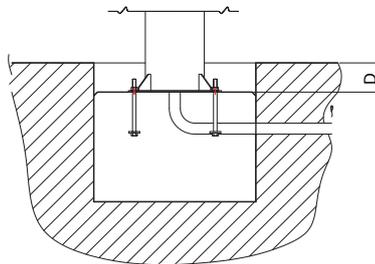
- For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.
- A minimum soil bearing capacity of 75 kN/m² is assumed.
- Foundation base dimensions are typical and may vary depending on site conditions.
- Please refer to the foundations & windloading section on pages 101-103 for further guidance.

REFER TO INSTALLATION METHODS ON PAGES 104-106

GALVANISED HOLDING DOWN BOLTS



BURIED DEPTH BELOW GROUND LEVEL



Anti-Vandal Range Pole Specifications ←

Altron anti-vandal poles have a range of smart design features that ensure they are the toughest products available on the market. They have been successfully installed for many years in inner city areas of Belfast, London, Manchester, Glasgow, Leeds and many other high risk areas.

- o Higher initial expenditure, but significant cost savings through not having to replace expensive camera equipment repeatedly
- o Reduces camera down time and service call outs
- o AWI545/AVD, AWI665 and AWI664 poles look like standard cabinet based camera poles, therefore minimising visual impact
- o Fire retardant upgrade to cabinet available on AWI664 and AWI663 pole variations



AWI665

Pole Security Features

	AWI545/AVD	AWI665	AWI664	AWI663
Double Skin Base			•	•
Anti-Ram Base				•
Double Skin Pole Section			•	•
Dead Bolt Door Locking Mechanism	•	•	•	•
Heavy Wall Cabinet	•	•	•	•
Strengthened Base Plate and Increased Holding Down Capacity		•	•	•
High Security Door Locks	•	•	•	•
Double Door Access			•	•
Holding Down Bolts Below Ground Level	•	•	•	•
Stainless Steel Hinges on Outer Door		•	•	•
No Locks on Outer Door	•	•	•	•

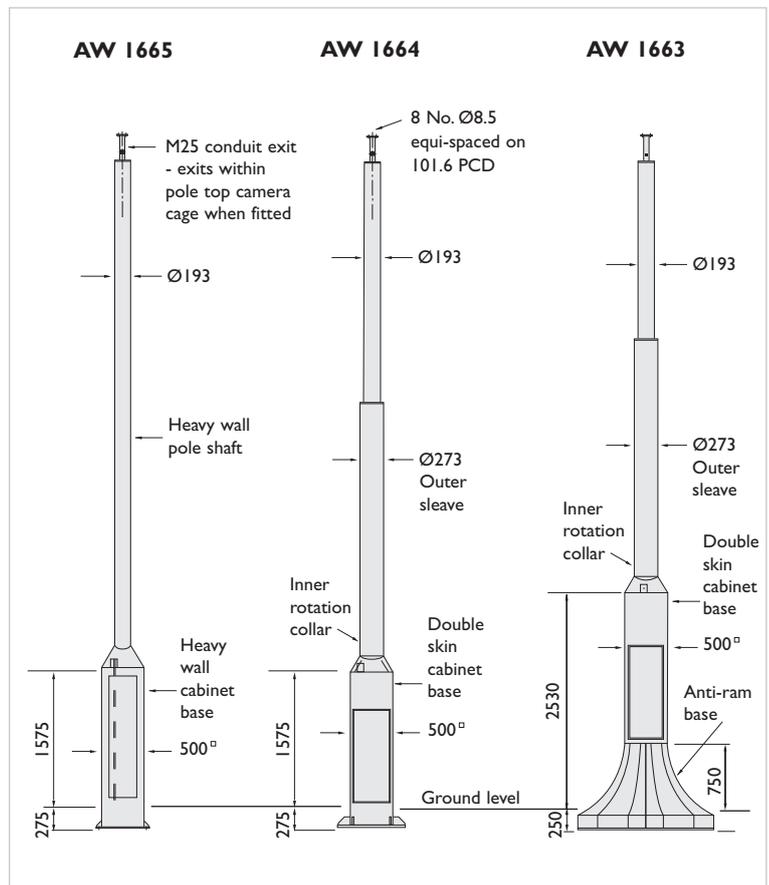
- o AWI545/AVD not shown below, is based on the AWI545/UP cabinet based pole range (see p35)
- o All poles are hot dip galvanised to ISO 1461 as standard and painting to colours from BS and RAL colour charts, over the galvanised finish is available as an optional extra



AWI664



AWI663



→ Gallery - Ornate Poles

Altron ornate camera poles are used extensively throughout Central London



AW1545/8 with westminster embellishment to customer specification



AW1502/10 with westminster embellishment to customer specification



AW1545/8/HNEK



AW1545/6/TNEK

Altron ornate poles are based on our cabinet based AW1545 UP range and our AW1502 lamp standard range. They incorporate all of the benefits of these standard pole ranges, but are appropriate for historic and sensitive locations where the camera pole needs to blend in with surrounding street furniture and architecture. The standard range is made up of the most popular variations, but we can also provide poles with a specific architectural theme for individual projects.

Altron's numerous security design features ensure a good level of protection against vandal attacks.



AW1545 - ENEK-HNEK-TNEK

Height range 4m - 15m

Ornate versions of the AW1545 UP cabinet base pole range, incorporating cast embellishment kits to enhance the pole appearance. Ideally suited to areas of historical or architectural importance where CCTV systems are required to blend aesthetically with their surroundings. A full range of ornate brackets and accessories ensure an authentic installation.

Typically used for the following types of installation

- Public area urban CCTV
- Historic sites
- Private residences

Security Features

- Internal cabling
- Close fitting flush doors
- Solid secure heavy duty door locks and high security lock
- Secure venting method
- Additional security measures available
- Anchor bolts below ground level

General Features

- Stable structures for all camera types
- Flush fitting door, level with cabinet surface, no external frame combined with flush fitting Altron secure locks and a high security lock giving enhanced security and a clean aesthetic appearance
- 4 point security door locking option
- Standard convection venting eliminates condensation (when the pole base is properly sealed on installation)
- A wide range of ornate Altron Accessories and Brackets available
- Pole adaptations available to suit customers/project specific requirements
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- For design, manufacturing and finishing standards, see details on page 107



AW1502 - ENEK

Height range 4m - 10m

Ornate version of the AW1502 lamp standard range. The cast embellishment kits enhance the pole appearance and are often used to match ornate features of existing lighting columns to bring conformity to street furniture but ensuring cameras are on a stable pole built for CCTV use. A full range of ornate brackets and accessories ensure an authentic installation.

Typically used for the following types of installation

- Public area urban CCTV
- Historic sites
- Private residences

Security Features

- Internal cabling
- Close fitting flush doors
- Solid secure heavy duty door locks and high security lock
- Anchor bolts below ground level

General Features

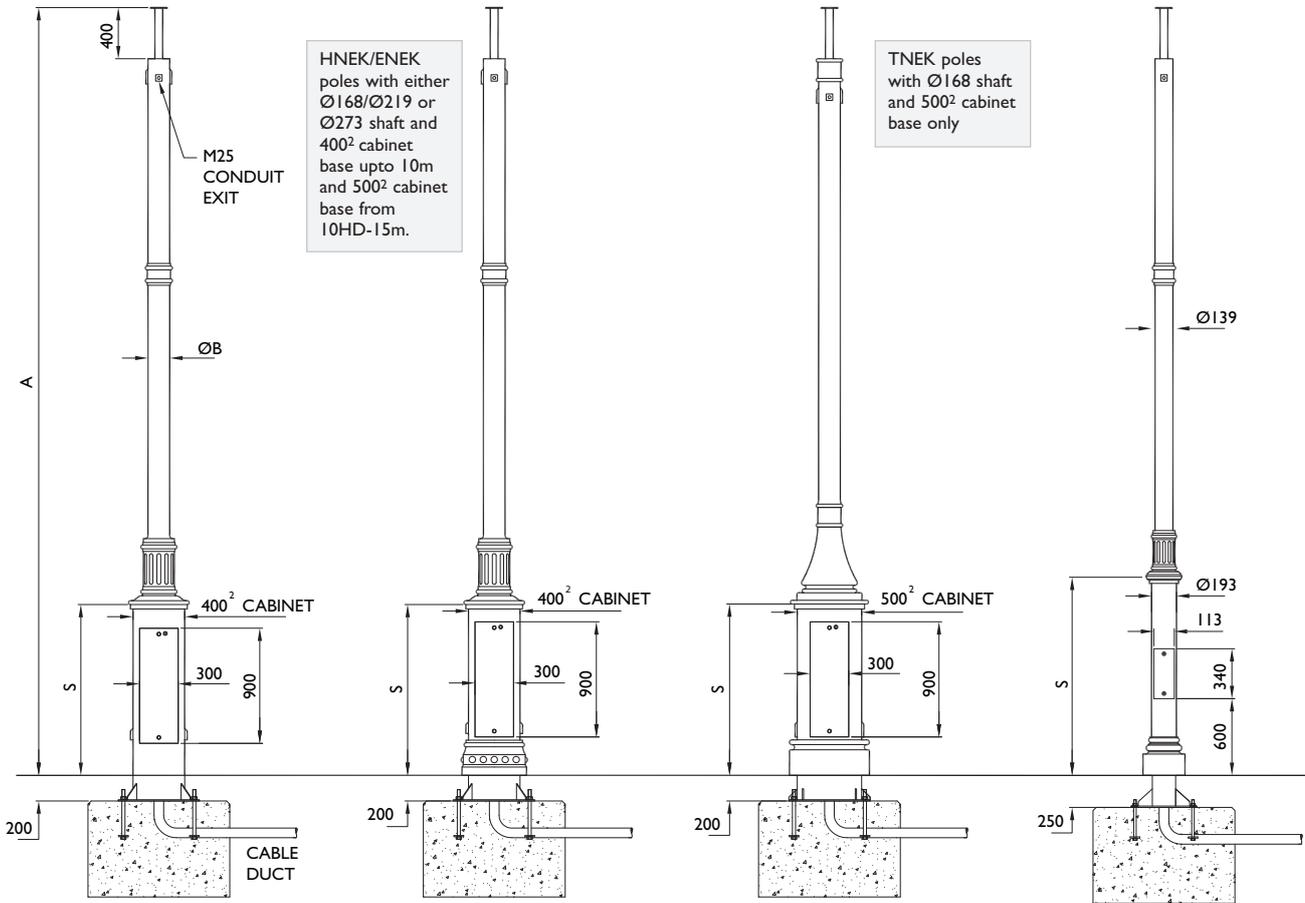
- Stable structures for all camera types
- Versatile range with many accessories for both CCTV and dual lighting use
- Double door versions available for dual CCTV and lighting, keeping services separate
- Compartments have doors that are close fitting and flush with heavy duty secure locks and are complete with treated backboard
- Available in bolt down and embedded/direct burial versions
- A wide range of ornate Altron accessories and Brackets available
- Pole adaptations available to suit customers/project specific requirements
- Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- For design, manufacturing and finishing standards, see details on page 107

AW1545 HNEK

AW1545 ENEK

AW1545 TNEK

AW1502 ENEK



FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 49

Model No. Add suffix eg AW1545/4/TNEK	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Pole ØB	Cabinet height above ground S		Product weight kgs
					ENEK\TNEK	HNEK	
AW1545/4	4	40	0.25	168	1300	1200	397
AW1545/5	5	40	0.25	168	1300	1200	418
AW1545/6	6	40	0.25	168	1300	1200	436
AW1545/7	7	40	0.25	168	1300	1200	490
AW1545/8	8	40	0.25	168	1300	1200	517
AW1545/8HD	8	40	0.25	219	1300	1200	548
AW1545/9	9	40	0.25	219	1600	1200	619
AW1545/10	10	40	0.25	219	1600	1600	702
AW1545/10HD	10	40	0.25	273	1600	1600	820
AW1545/12	12	40	0.25	273	1600	1600	920
AW1545/15	15	40	0.25	273	1600	1600	1090

Note TNEK version Available in 500² cabinet, and Ø168 shaft only and only up to 12m

Model No.	Height in mtrs A	Max equip weight at top kgs	Max equip surface area m ²	Base height C	Product weight kgs
AW1502/3/ENEK	3	40	0.50	1100	126
AW1502/4/ENEK	4	40	0.50	1100	144
AW1502/5/ENEK	5	30	0.50	1500	162
AW1502/6/ENEK	6	30	0.40	1500	180
AW1502/7/ENEK	8	25	0.30	1500	198
AW1502/8/ENEK	10	25	0.25	1500	216

Accessories

Ornate top mounting brackets for Fixed and PTZ cameras	P48
Ornate brackets for Dome cameras	P48
Clamp-on ornate camera mounting brackets	P48
Anti-climb guards	P77
Telemetry box mounting brackets	P77
PIR mounting ring	P84

Quick reference

Pole top dome brkt	PT-1689
Pole top Fixed	PT-1689/SF
Pole top PTZ brkt	PT-1689/SPT
Telemetry bracket	ATBP

Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

→ Embellishment Details

Altron embellishments are produced to a high standard in cast aluminium or cast iron. Our standard embellishment ranges are shown in detail below. We also provide castings designed to meet specific customer requirements, examples are shown on p43, embellishments produced for Westminster Council.

AWI545 HNEK



AWI545 TNEK



AWI545 ENEK



AWI502 ENEK



Top



Top



Top



Top



Mid



Mid



Mid



Mid



Base



Base

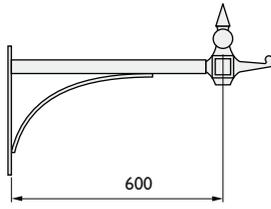


Base

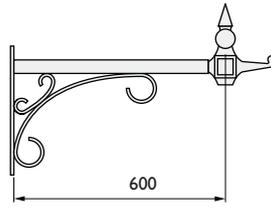
Ornate Poles

All brackets available in all 3 styles, other styles made to order

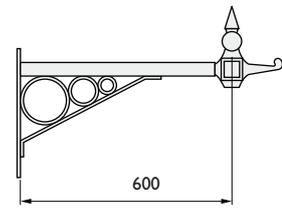
Ornate Styles



Simple Ornament
- S



Newcastle Scroll
- N



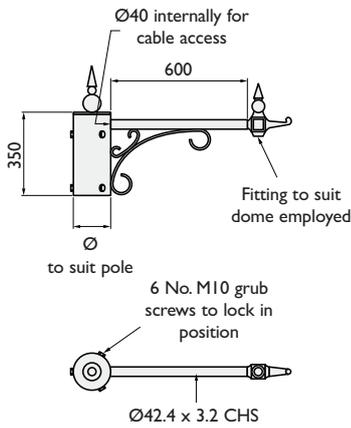
Edinburgh Hoop
- E

Change part number suffix to suit ornate style required

Pole Mounting Brackets

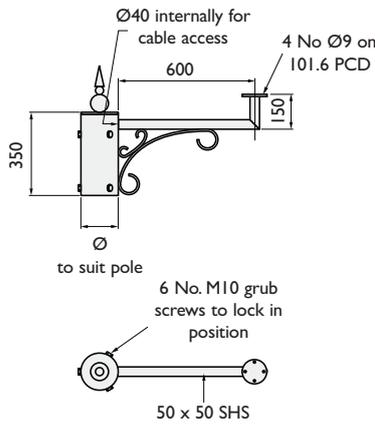
PT-1689-N

Ornate Pole top mounting bracket



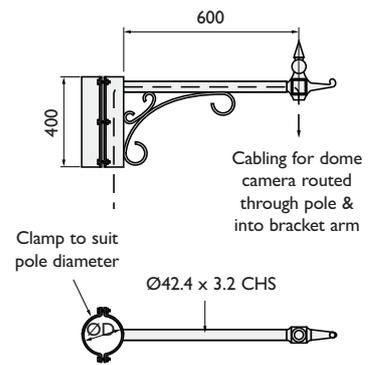
PT-1689-N/SPT

Ornate pole top mount bracket for PTZ camera



PMB (Ø*)1689-N (*Pole diameter)

Ornate pole mounting bracket

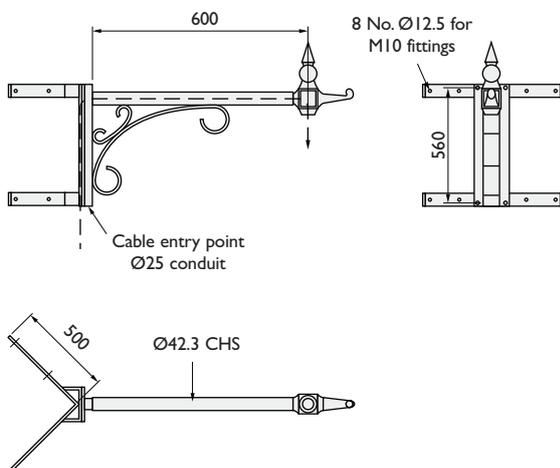


Ornate Poles

Wall Mounting Brackets

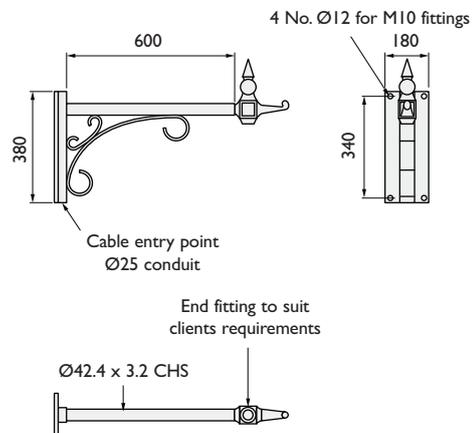
C-1689-N

Ornate corner mounting bracket



W-1689-N

Ornate wall mounting bracket



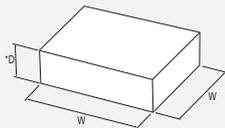
Also available in wall & corner mount up to 2000mm stand off Pt No. AW2058

→ Ornate Poles Foundation & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES (I ²)	BASE PLATE SIZE (H ²)	BURIED DEPTH (D)	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D X L	FOUNDATION SIZES FOR THE UK								
							COUNTRY LOCATION			TOWN LOCATION					
							AREA A	AREA B	AREA C	AREA A	AREA B	AREA C			
AW1545UP - ENEK-HNEK-TNEK Fixed cabinet based poles. 400 ² cabinet base for ENEK & HNEK and 500 ² cabinet base on TNEK															
AW1545/4	4	550	630	200	370x370	M24x325	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5					
AW1545/5	5	550	630	200	370x370	M24x325	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5				
AW1545/6	6	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55				
AW1545/7	7	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6			
AW1545/8	8	550	630	200	370x370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65			
AW1545/8/HD	8	550	630	200	370x370	M24x425	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1545/9	9	550	630	200	370x370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7
AW1545/10	10	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545UP - ENEK-HNEK (TNEK not available in these sizes). Fixed cabinet based poles. 500 ² cabinet base as standard.															
AW1545/10/HD	10	700	800	200	470x470	M27x600	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75
AW1545/12	12	700	800	200	470x470	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9
AW1545/15	15	700	800	200	470x470	M27x600	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.0	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0
AW1502 - ENEK tubular lamp standard poles.															
AW1502/3	3	350	405	250	200	M16x245	0.8 x 0.8 x 0.4	0.8 x 0.8 x 0.4	0.9 x 0.9 x 0.5	0.8 x 0.8 x 0.4					
AW1502/4	4	350	405	250	200	M16x245	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5
AW1502/5	5	350	405	250	250	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55
AW1502/6	6	350	405	250	250	M20x325	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6
AW1502/7	7	450	510	250	250	M20x325	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65
AW1502/8	8	450	510	250	250	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7

Table dimensions in mm

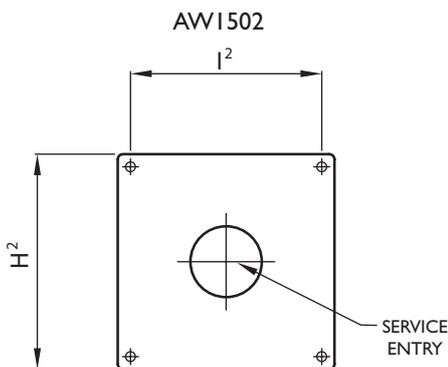
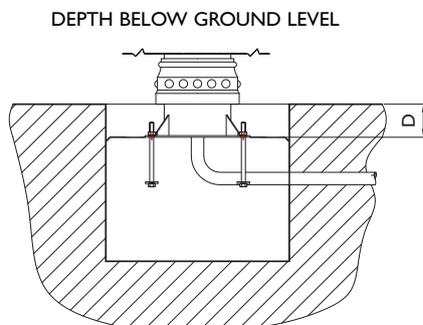
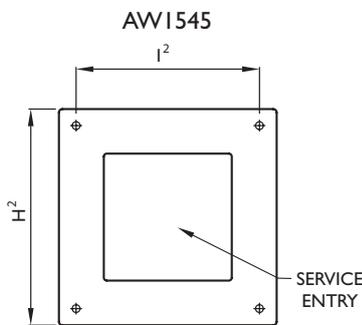
Foundation sizes in table are W x W x D
Dimensions in metres



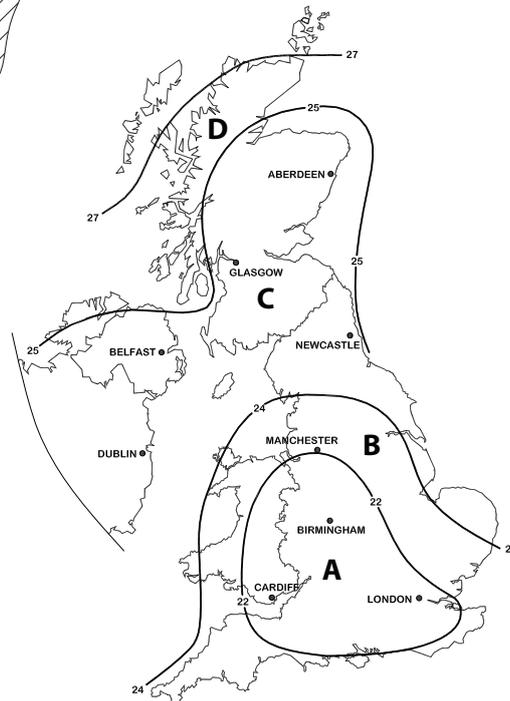
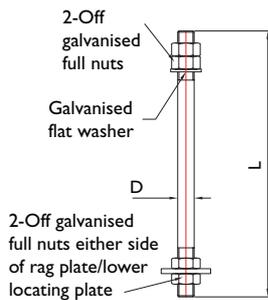
*D= 1000 on PM and buried flange/embedded base models

- For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.
- A minimum soil bearing capacity of 75 kN/m² is assumed.
- Foundation base dimensions are typical and may vary depending on site conditions.
- Please refer to the foundations & windloading section on pages 101-103 for further guidance.

REFER TO INSTALLATION METHODS ON PAGES 104-106



GALVANISED HOLDING DOWN BOLTS





ACC4BPLA on deployable base



AWI545/6/500/LTH with twin arm



AWI545/4/LTH special



Low emission zone cantilever pole

Altron Produce a range of products to satisfy most highways applications. Lowering trolley head poles that comply with HA requirements, deployable products for temporary road works and cantilever poles for ANPR and variable speed monitoring.

Altron's numerous security design features ensure a good level of protection against vandal attacks.



Lowering Trolley Head Poles ←



AWI545/LTH Cabinet Based



AWI502/LTH Lamp Standard



AWI502/LTH/I68/SN Slim Line Lamp Standard

We have developed a range of features for our Lowering Trolley Head poles, to make them easy, reliable and above all, safe to use. These features mean that a pole with the relevant options included, can be operated by one man standing on the ground, without the need for steps, or the need to support heavy camera loads, when lowering the camera into the upright maintenance position. This therefore is the safest and easiest to operate Lowering Trolley Head pole available on the market today.

Altron's numerous security design features ensure a good level of protection against vandal attacks.

→ Lowering Trolley Head Poles



AWI502/10LTH/DDA

Height ranges AWI545/LTH & AWI502/LTH 4m - 15m
Height range AWI502/LTH/I68 Slim-line 4-10m

Altron Lowering Trolley Head Poles enable CCTV equipment to be serviced at ground level, safely, without the need for a man lift or a clear area to tilt the pole over. This is particularly useful in locations where road closures would otherwise be required, pavement locations and pedestrianised areas or where it is not possible to get a man lift and there is no space to tilt the pole over. The AWI545 cabinet based version offers a fully integrated solution, where equipment is mounted in the base of the pole, so no separate street cabinet is required.

Typically used for the following types of installation

- o Where access to the camera location is restricted
- o Public area urban CCTV
- o Highways
- o Prisons and detention facilities
- o Railway platforms & car parks
- o Car parks
- o Retail Parks
- o Sports stadia

Security Features

- o Internal cabling
- o Close fitting flush doors
- o Solid secure heavy duty door locks and high security lock
- o Secure venting method
- o Internal padlock facility available to stop unauthorised access to winch mechanism
- o Anchor bolts below ground level

General Features

- o Stable structures for all camera types
- o Design complies with Highways Agency specification.
- o Trolley Head locks solidly in the raised position by means of a cam lever uplatch, meaning that there is no movement in the Trolley Head when the camera is in operation.
- o AWI545/LTH cabinet based version also available with 500 square cabinet for additional equipment mounting capacity.
- o Flush doors and secure locks as standard, enhance security and appearance.
- o Standard convection venting on AWI545/LTH version eliminates condensation (when the pole base is properly sealed on installation)
- o Unique slim-line version up to 10 metres in height, using a 168 diameter shaft, giving an extremely slim outline silhouette.
- o A wide range of standard Altron Accessories available
- o Constructed in high tensile steel and hot dip galvanised after fabrication for durability
- o Option of painting over the galvanised finish in colours available from BS and RAL colour charts
- o For design, manufacturing and finishing standards, see details on page 107

Pole Options Explained

Our lowering trolley head pole range is made up of the basic units, part numbers AWI502/LTH and AWI545/LTH. We offer a full range of upgrades as additions to the basic poles, as outlined below. All additional options are explained further in the following pages.

Basic pole (AWI502/LTH)

Lamp standard version with no back board within the winch compartment. Winch is auto-braking and manually operated and the trolley head neck is fixed. Quick release uplatch included as standard. Trackway is extra.

Basic pole with cabinet base (AWI545/LTH)

As the AWI502/LTH, but with a cabinet base. There are twin doors as standard, front and back with equipment mounting boards within both compartments. Trackway is extra.

Addition /DO, Drill Operated dual drum winch

This winch requires the Drill winding unit DW/DO to operate it. This enables the trolley head to be lowered using the DW/DO, rather than the manually operated the winch. Winch has dual drum, so two cables are employed, with the second cable as a failsafe. Trackway is fitted as standard with this option.

Addition of /TR - Trackway.

The benefit of Trackway, is to keep the trolley head aligned when lowering and raising, in high wind conditions (an extra item on the basic pole models).

Addition of the /DDA Drop Down Arm.

Our patented Drop Down Arm, enables camera equipment to be brought down to waist height, for maintenance, without having to support the weight of the camera equipment by hand.

Addition of the /RA, Rotating Arm and /SN-RA Swan Neck Rotating Arm option

This is ideally suited for dome mounting using our swan neck, or for light PTZ applications. This is a cost effective way of getting camera equipment down to ground level for maintenance. We do not recommend this option for heavier PTZ applications, of loads over 10 kgs.

Addition of /CM, Cable Management

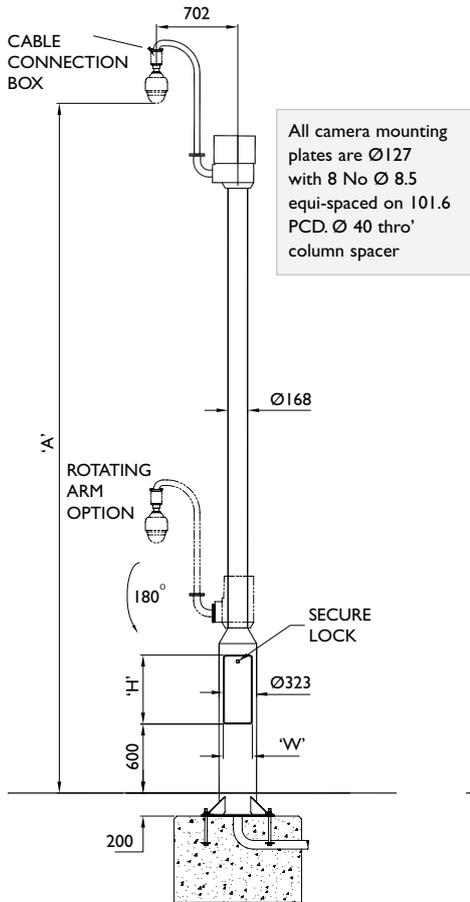
Cable management enables camera cables to be disconnected and marshalled through the pole automatically.

Cable pulley configurations

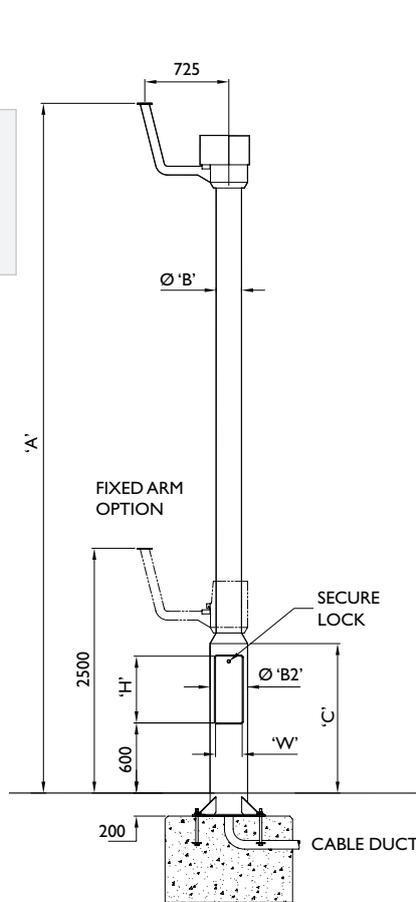
A number of pulley configurations are available for the head of the pole, depending on the type of cable being used to feed the camera. Please contact our Sales team who will provide further information and advice.

Lowering Trolley Head Poles ← Technical Specifications

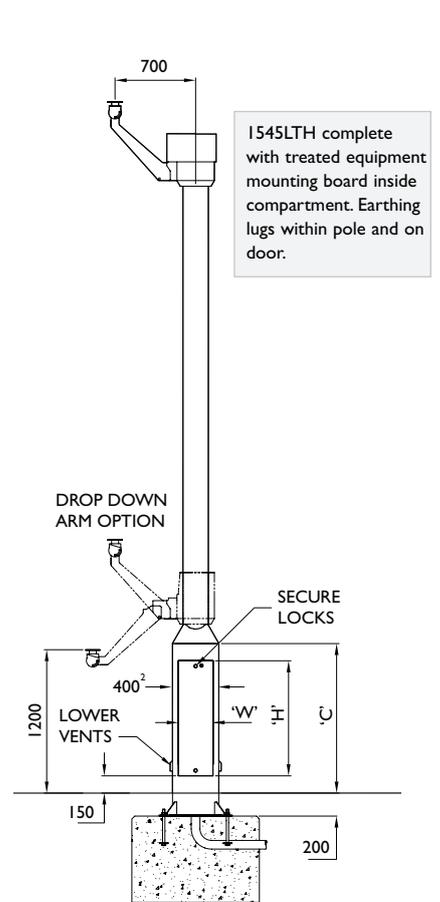
AW1502/LTH/168/SN Slimline Lamp Standard



1502 LTH Lamp Standard



1545 LTH Cabinet Based



FOR FOUNDATION AND BOLTING DETAILS REFER TO PAGE 58

Model No.	Height in mtrs	Max equip weight at top kgs	Max equip surface area m ²	Pole ØB	Cabinet height above ground C	Front door size H x W	Rear door size H x W	Product weight kgs
AW1545/4LTH	4	30	0.25	219	1300	970x270	520x270	281
AW1545/5LTH	5	30	0.25	219	1300	970x270	520x270	310
AW1545/6LTH	6	30	0.25	219	1300	970x270	520x270	339
AW1545/7LTH	7	30	0.25	219	1300	970x270	520x270	368
AW1545/8LTH	8	30	0.25	219	1300	970x270	520x270	397
AW1545/9LTH	9	30	0.25	219	1300	970x270	520x270	513
AW1545/10LTH	10	30	0.25	219	1300	970x270	520x270	548
AW1545/10HDLTH	10	30	0.25	273	1300	970x270	520x270	738
AW1545/12LTH	12	30	0.25	273	1300	970x270	520x270	731
AW1545/15LTH	15	30	0.25	273	1300	970x270	520x270	910

Model No.	Height in mtrs	Max equip weight at top kgs	Max equip surface area m ²	Shaft ØB	Base ØB2	Base height C	Door aperture size H x W	Product weight kgs
AW1502/4LTH	4	30	0.25	219	323	1300	425x177	277
AW1502/5LTH	5	30	0.25	219	323	1300	425x177	306
AW1502/6LTH	6	30	0.25	219	323	1300	425x177	335
AW1502/7LTH	7	30	0.25	219	323	1300	425x177	364
AW1502/8LTH	8	30	0.25	219	323	1300	425x177	393
AW1502/9LTH	9	30	0.25	219	323	1300	425x177	495
AW1502/10LTH	10	30	0.25	219	323	1300	425x177	530
AW1502/10HDLTH	10	30	0.25	273	355	1300	425x177	693
AW1502/12LTH	12	30	0.25	273	355	1300	425x177	686
AW1502/15LTH	15	30	0.25	273	355	1300	425x177	815

AW1545/LTH & AW1502/LTH Options

Decorative Banding (on Cabinet only)	/B
Altron 4 Point Locking	/A4P
Trackway Upgrade (for manually operated poles)	/TR
Dual drum Winch & Drill Winding Device Upgrade (Includes trackway)	/DO
Drill Winding Device	DW/DO
Drop Down Arm for 15kg camera	/DDA/15
Drop Down Arm for 30kg camera	/DDA/30
Cable Management System	/CM
Rotating Arm	/RA
Swan Neck Rotating Arm	/SN-RA

AW1502/LTH only Options

High Security Lock	/HS
--------------------	-----

AW1545/LTH Cabinet & Door Configurations

Standard cabinet base size is 400² Standard door configuration is one full size door on winch access side & one half size door on opposite side.

450sq cabinet	/450
500sq cabinet	/500

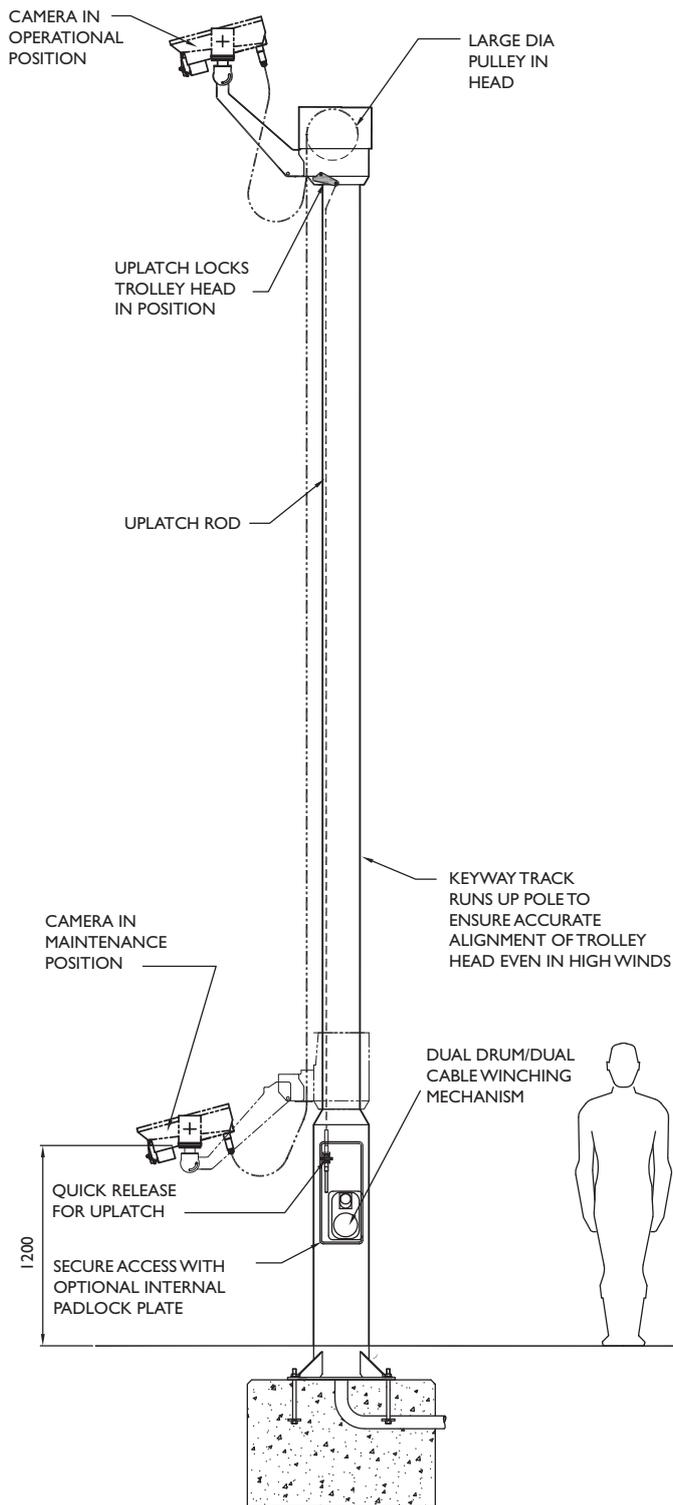
Accessories

AW1545/LTH & AW1502/LTH

Manual Winch Winder for Dual Drum Winch	/MWW
Support Bracket for Drill Winding Device	/DSB
Internal Padlock Plate	/IPP

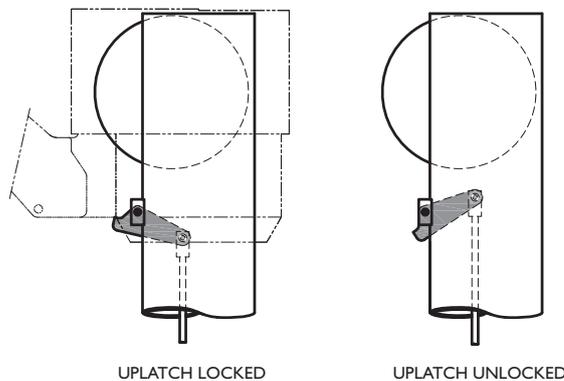
Where payloads are greater than those stated above, please contact Altron
All dimensions in mm unless stated otherwise

→ Lowering Trolley Head Poles Options & Features



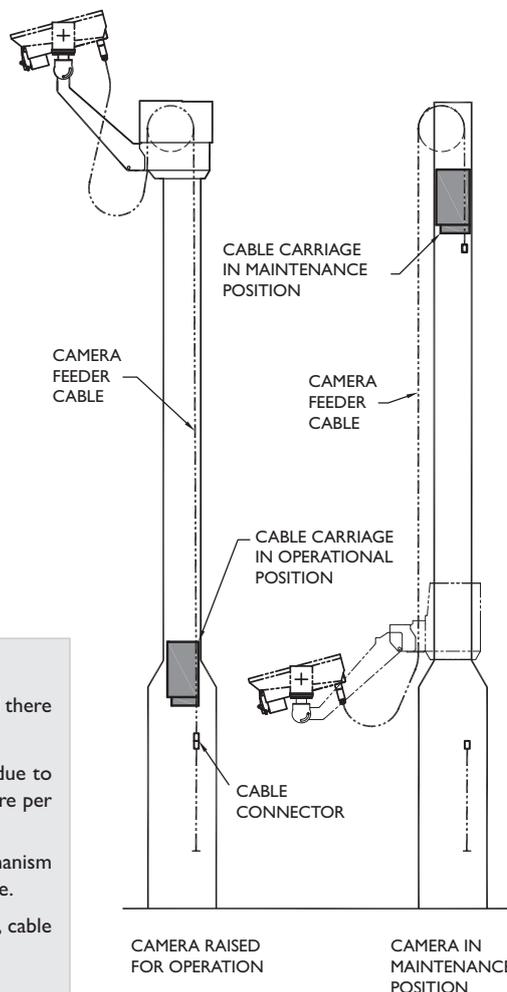
Uplatch

Uplatch with quick release - Altron's unique cam latch system locks the trolley head into the top canopy so that there is no movement or vibration in the trolley head when raised and means that the winch cables do not hold the trolley head in the raised position. The quick release up-latch mechanism is quick and easy to use.



Cable Management / CM

Altron's unique system means that the camera feeder cables are marshalled inside the pole shaft when the trolley head is being lowered. There is no need for an additional loop of cable or for a lanyard to be held, whilst operating the pole, therefore a one man operation.



Safety Features

Two winch cables - on DO version, means that there is a failsafe back up cable should there ever be a problem with the main winch cable

Slow free run speed of dual drum winch - In the unlikely event of a winch failure, due to the high gearing ratio of the DO winch unit, the trolley head descends at less than 1 metre per second and comes to rest on the pole shoulder, without any damage taking place.

Failsafe of auto-braking manual winch - For manual winches, the breaking mechanism closes and locks if the friction brake pad should fail, therefore no run-away can take place.

Extensive 'full life' testing - we have gone through rigorous testing of the winch, cable and trolley head components to replicate more than 10 years of operation. All parts are manufactured to be either maintenance free, or give maximum life to first maintenance.

Lowering Trolley Head Poles ← Options & Features

Drop Down Arm / DDA (Patent No. 2476970)

The Drop Down Arm enables camera servicing in the upright position at ground level without the need for steps. The arm takes the weight of the camera equipment so this is an easy, one man operation that is safe to carry out. Camera loads of up to 30kgs can be safely lowered.

HEAVY DUTY PIVOT LOCKS
CAMERA SOLIDLY IN VERTICAL
POSITION WHILST IN OPERATION
& THEN ALLOWS CAMERA
ROTATION FOR MAINTENANCE

GAS STRUT RETRACTED WHEN
ARM IN RAISED POSITION

SPRING PLUNGER LOCATES ARM
IN RAISED & LOWERED POSITIONS

GAS STRUT EXTENDED WHEN
ARM IN LOWERED POSITION

CAMERA ROTATED TO UPRIGHT
POSITION TO ENABLE MAINTENANCE

CAMERA FEEDER
CABLE

CABLE CLAMP

CABLE GLAND PLATE
WITH 2x EXIT POINTS

Rotating Camera Arm / RA

This enables a light load such as a small PTZ to be brought down by hand, by rotating the camera arm downwards, supporting the load by hand. The arm can be set up on site so that it rotates either to the left or to the right. Camera cables can be fed internally through the arm or glanded to the outside.

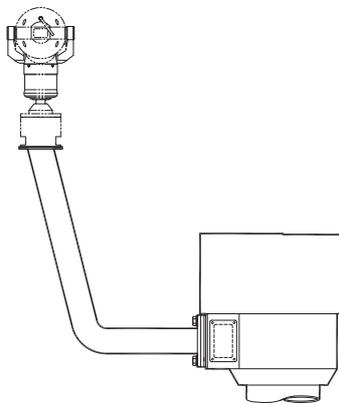
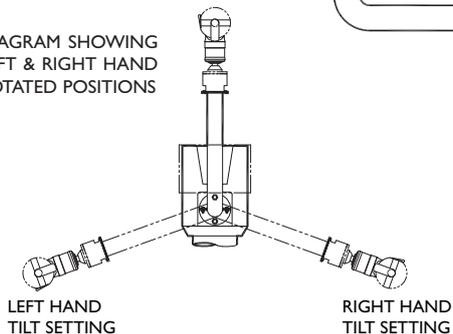


DIAGRAM SHOWING
LEFT & RIGHT HAND
ROTATED POSITIONS



LEFT HAND
TILT SETTING

RIGHT HAND
TILT SETTING

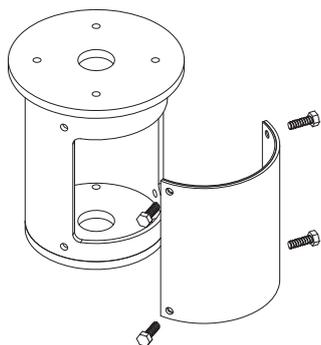


Drop down arm in raised position



Drop down arm in lowered position

→ Lowering Trolley Head Poles Options & Features

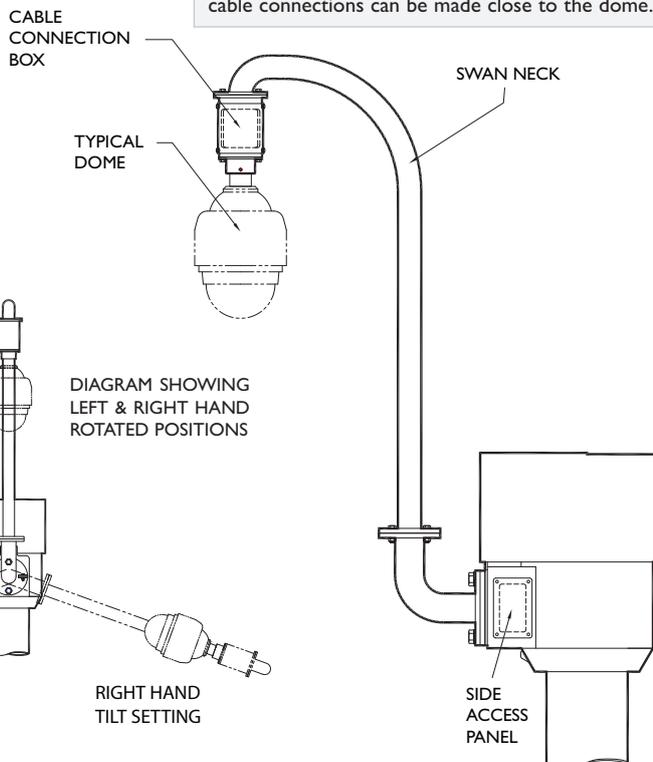


Cable Connection Box / CCB

This is a water proof box with a removable front panel with sufficient space to allow cable connectors to fit inside. It can be provided with glanded entry and exit.

Swan Neck Rotating Arm /SN-RA

The swan neck lifts the dome above the top of the pole for better coverage and the rotating arm allows the dome to be brought down for maintenance. The arm can be set up on site so that it rotates either to the left or to the right. A connection box can be fitted above the dome so that cable connections can be made close to the dome.



SN-RA Swan Neck Rotating Arm

Dual Drum Winch / DO Drill Winding Device DW/DO

Dual Drum Winch and Drill Winding Device - The dual drum winch gives complete safety with a second 'safety' winch rope. The drill winding device uses the latest battery technology with a speed limiter and torque lock upgrade, specifically for this application to ensure safe, reliable operation. The Drill winding device is light and transferable, so one device can service many poles. This upgrade meets the requirements of ILE TR7.



DO - Dual drum winch



DW/DO Drill winder hand held



DSB - Drill Support Bracket, with Drill winder located in bracket

Drill Support Bracket / DSB

Drill Winding Device Support Bracket - this can be incorporated for easy one hand operation and takes the weight of the drill winding device, so operating the pole could not be easier.

Trackway / TR

Trackway Upgrade - Trackway keeps the trolley head running true, when lowering and raising even in very windy conditions. This is standard on /DO pole versions.



TR Trackway

Internal Padlock Plate / IPP

This is a close fitting internal plate that sits behind the main door, and only comes into view once the door is removed. It will withstand lever attacks and is a second line of defence to make our lowering trolley head poles extremely secure against vandal attacks.



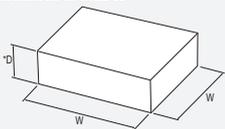
IPP Internal Padlock Plate

Lowering Trolley Head Poles ← Foundations & Bolting Details

MODEL NO.	HEIGHT MTRS	BOLT CENTRES ¹	BASE PLATE SIZE ¹	BURIED DEPTH ²	SERVICE ENTRY SIZE	HOLDING DOWN BOLT SIZE D X L	FOUNDATION SIZES FOR THE UK								
							COUNTRY LOCATION			TOWN LOCATION					
							AREA A	AREA B	AREA C	AREA A	AREA B	AREA C			
AW1545/LTH cabinet based, lowering trolley head pole - all variants															
AW1545/LTH/4	4	550	630	200	370x370	M24x325	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5			
AW1545/LTH/5	5	550	630	200	370x370	M24x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55			
AW1545/LTH/6	6	550	630	200	370x370	M24x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6			
AW1545/LTH/7	7	550	630	200	370x370	M24x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65			
AW1545/LTH/8	8	550	630	200	370x370	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7			
AW1545/LTH/9	9	550	630	200	370x370	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75			
AW1545/LTH/10	10	550	630	200	370x370	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8			
AW1545/LTH/10HD	10	700	800	200	370x370	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9			
AW1545/LTH/12	12	700	800	200	370x370	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0			
AW1545/LTH/15	15	700	800	200	370x370	M27x600	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1			
AW1502/LTH lamp standard, lowering trolley head pole - all variants															
AW1502/LTH/4	4	350	405	250	200	M20x325	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5			
AW1502/LTH/5	5	450	510	250	250	M20x325	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55			
AW1502/LTH/6	6	450	510	250	250	M20x325	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6			
AW1502/LTH/7	7	450	510	250	250	M20x325	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65			
AW1502/LTH/8	8	550	630	250	250	M24x425	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7			
AW1502/LTH/9	9	550	630	250	250	M24x425	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75			
AW1502/LTH/10	10	550	630	250	250	M24x425	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8			
AW1502/LTH/10HD	11	500PCD	Ø590	N/A	300	M27x600	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9			
AW1502/LTH/12	12	500PCD	Ø590	N/A	300	M27x600	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0			
AW1502/LTH/15	13	500PCD	Ø590	N/A	300	M27x600	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1			

Table dimensions in mm

Foundation sizes in table are W x W x D
Dimensions in metres

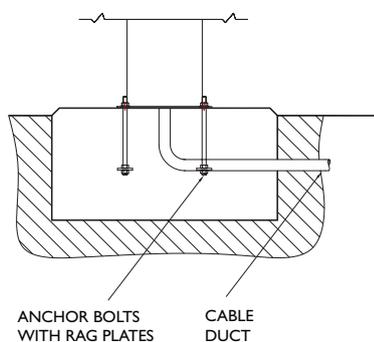


*D= 1000 on PM and buried
flange/embedded base models

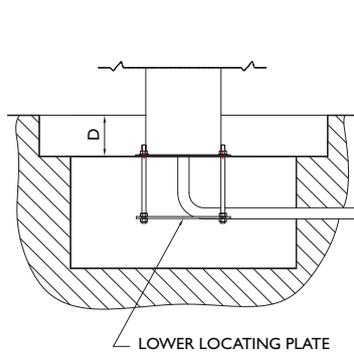
- For area D locations and exposed locations over 100m above sea level for areas A, B and 150m above sea level for area C, we recommend increased foundation sizes. Please refer to the table on page 101 for conformation of these.
- A minimum soil bearing capacity of 75 kN/m² is assumed.
- Foundation base dimensions are typical and may vary depending on site conditions.
- Please refer to the foundations & windloading section on pages 101-103 for further guidance.

REFER TO INSTALLATION METHODS ON PAGES 104-106

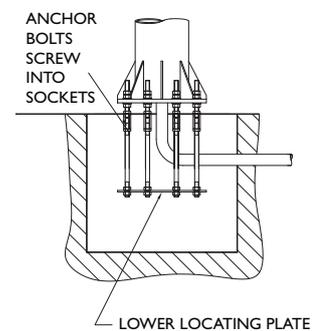
SURFACE MOUNTED SHOWING
TEMPLATE METHOD



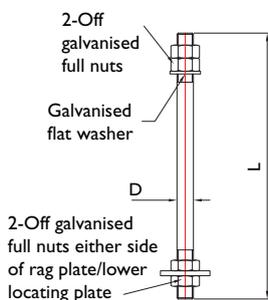
BELOW SURFACE MOUNTED
SHOWING BOLT FRAME METHOD



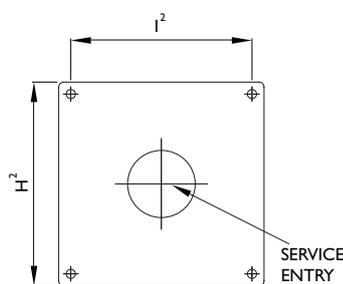
BOLT FRAME IN
ACCORDANCE WITH BD94/07



GALVANISED HOLDING DOWN BOLTS



AW1502/LTH



AW1545

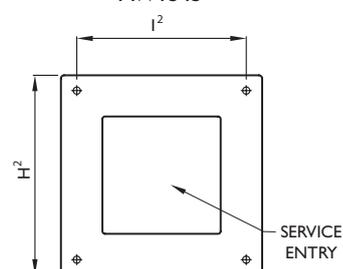
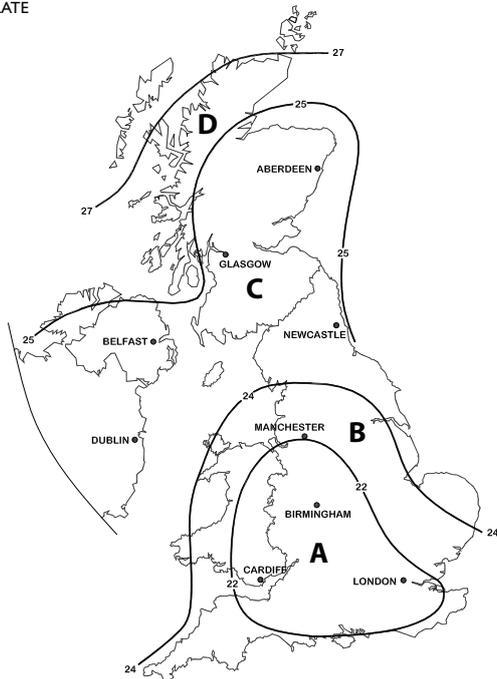
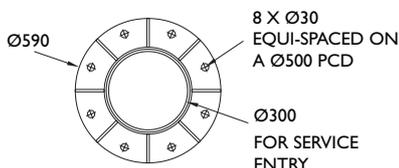


DIAGRAM FOR AW1502/LTH
FROM 10HD UP TO 15M



→ Temporary & Deployable Solutions

With increasing demand for temporary solutions for roadworks and major events, Altron has developed a range of pre-cast foundations that fully comply with HA standards and industry standard foundation requirements. Based on our knowledge gained from rapid deployable products for the telecoms industry, we cast foundations in house at our factory, keeping close control over the process and ship UK wide using specialist vehicles for offloading.

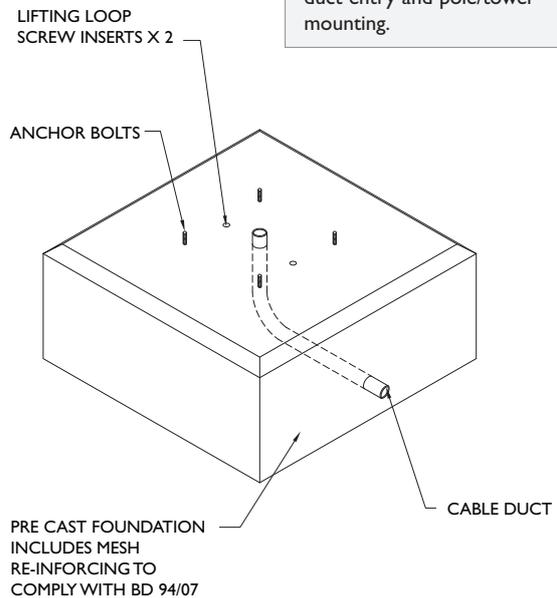
Features & Services

- o Pre cast foundations can be produced to suit any Altron product
- o Ducting arrangements provided to suit customer requirements
- o Proven product and method of delivery, used in many installations over the past 8 years
- o Can be supplied in accordance with Highways Agency requirements
- o Full design service & support



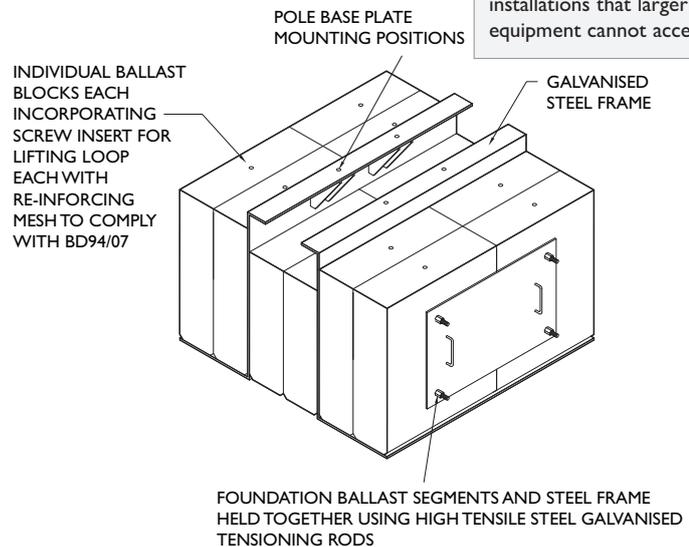
DEPLOYABLE PRE-CAST FOUNDATION BLOCK

Standard block sizes giving a cost effective solution, produced to customer requirements for cable duct entry and pole/tower mounting.



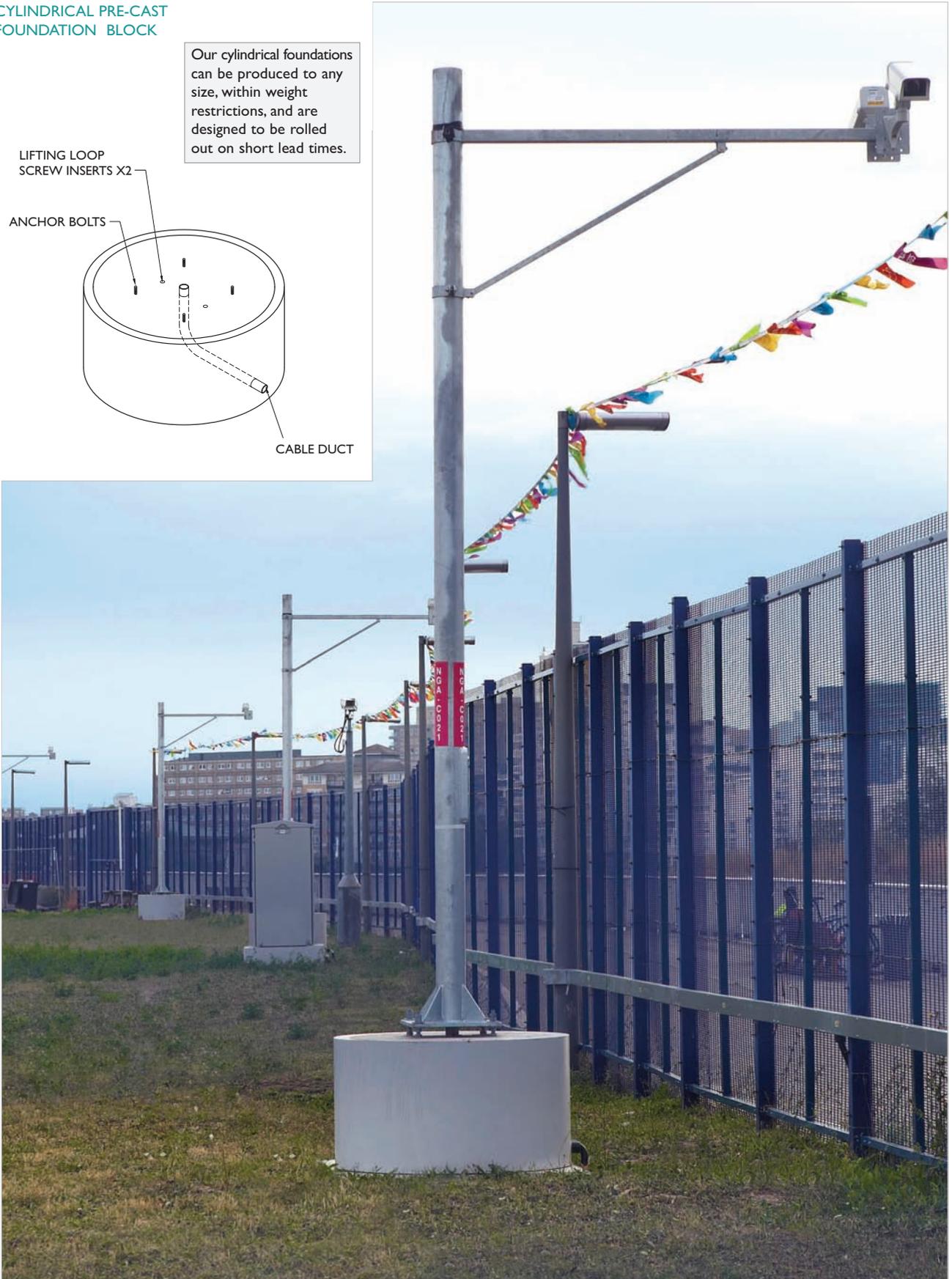
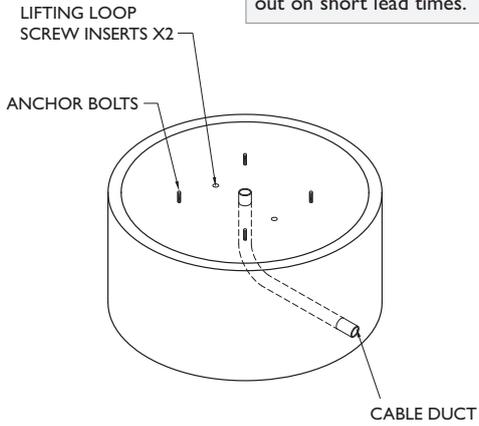
DEPLOYABLE SEGMENTED PRE-CAST FOUNDATION BLOCK

Used for large foundation requirements, enabling installations that larger lifting equipment cannot access.



CYLINDRICAL PRE-CAST FOUNDATION BLOCK

Our cylindrical foundations can be produced to any size, within weight restrictions, and are designed to be rolled out on short lead times.



→ Cantilever Poles

Cantilever poles are becoming more prevalent for traffic monitoring, average speed camera systems, ANPR, perimeter security and with the increasing need to service camera equipment in a safe area and reduce lane closures and associated costs, the ability to swing the arm in and also in certain applications, lower the equipment to ground level, Altron provide a full design service and range of products that meet these requirements.

Typically used for the following types of installation

- Roadworks and contraflows
- Highways and trunk roads
- Adjacent to quarantine areas - e.g. adjacent to railway lines
- Perimeter security

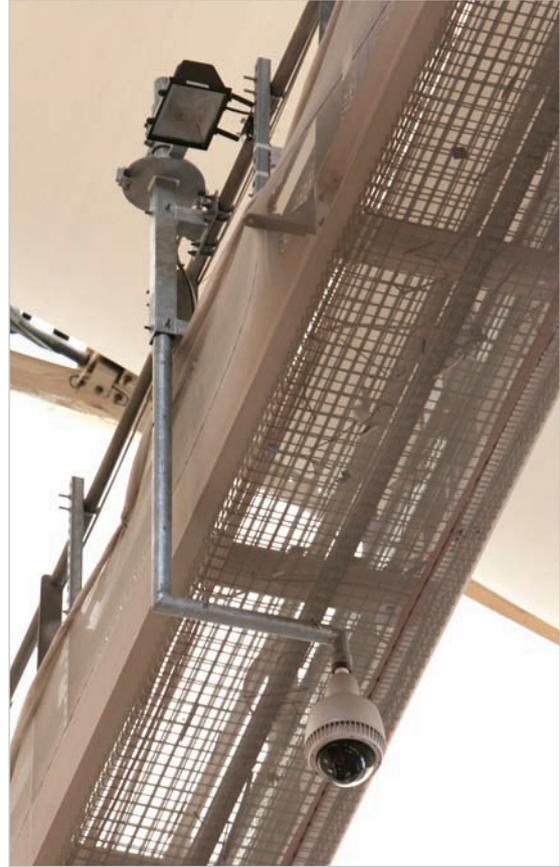
Security Features

- Internal cabling
- Close fitting flush doors
- Solid secure heavy duty door locks
- Secure venting method on cabinet based poles

Features & Services

- Full design service to comply with HA requirements, in accordance with BD94/07
- Manufacturing and test procedures comply with the Specification for Highways Works (SHW series 1300)
- In house software used to model structures for analysis of stability and product suitability - different camera arrangements can be easily modelled and proposals produced for any location
- Cabinet based versions available, based on our AWI545/UP range
- Flush doors and secure locks as standard, enhance security and appearance.
- Standard convection venting on AWI545/UP version eliminates condensation (when the pole base is properly sealed on installation)
- A wide range of Altron Accessories available





We offer a wide range of brackets and accessories, many available from stock, to suit the many varied camera mounting requirements for the CCTV industry. Where a standard bracket is not available, we produce variations and bespoke brackets on short lead times

→ Wall Mounted Poles

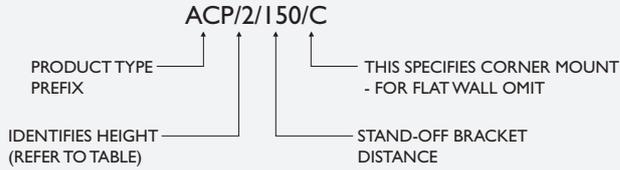


Ideal for gaining an elevated viewpoint from existing structures, we offer a range of wall and parapet mounted products, both fixed and tilt-down to suit most applications. Many are available from stock and where a standard product does not suit, we provide variations on short lead times.

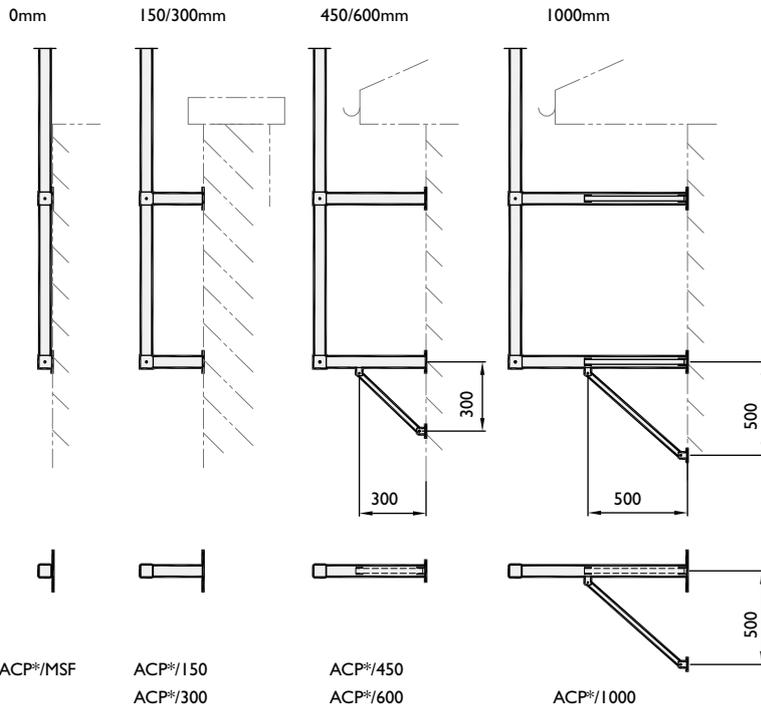
ACP Wall Mounted Poles

Ideal for gaining an elevated view point from existing structures.

ACP Part Numbering

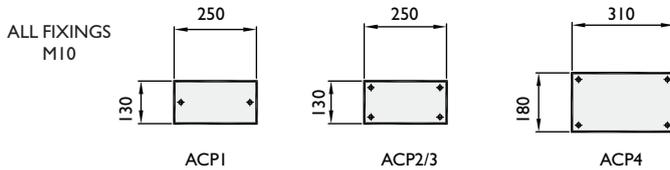


Stand-Off Bracket Options

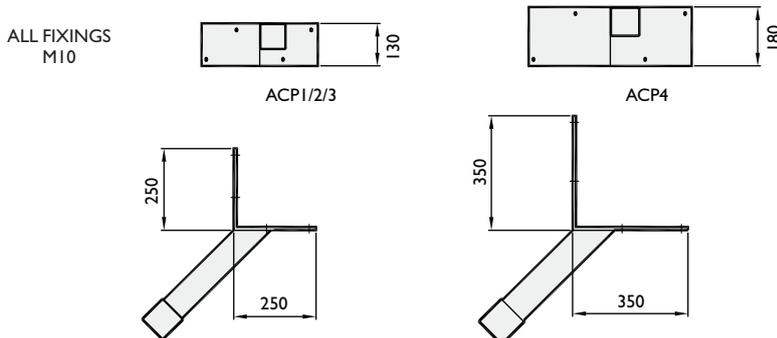


* INSERT MODEL NUMBER

Wall Plate Details



Corner Mount Bracket Details



Features

- o Poles up to 6m shipped on carrier for overnight delivery
- o Rigid construction
- o Hot dip galvanised for longevity
- o Full range of accessories available

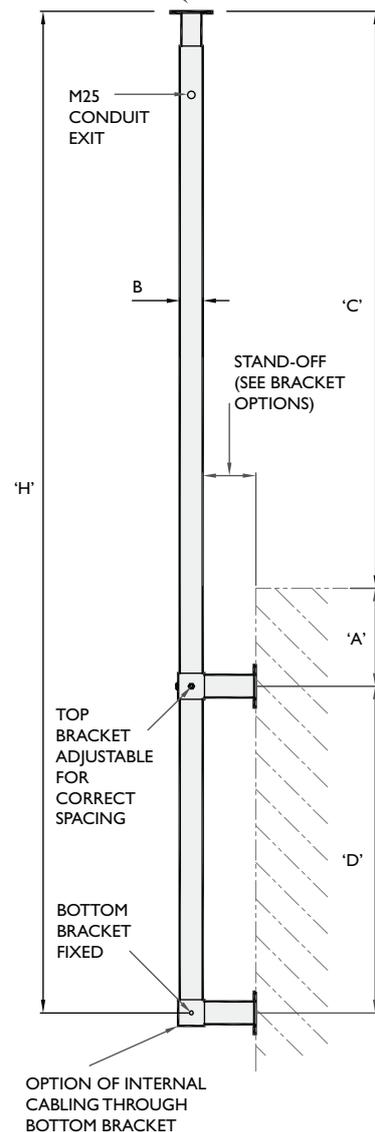
Model Number	H	B	A	C	D
ACP1	3m	70 ²	0.3m	1.7m	1m
ACP2	4m	80 ²	0.3m	2.2m	1.5m
ACP3	5m	80 ²	0.4m	2.6m	2m
ACP4	6m	90 ²	0.5m	3.5m	2m

● All variations held in stock

- o Dimension 'A' to be maintained for upper bracket fixing strength
- o Dimension 'D' to be maintained for camera stability

PTZ MOUNTING PLATE WITH 8 No. ø8.5 HOLES EQUI-SPACED ON A ø101.6 PCD.

**Max headload
25 kgs - 0.25m²**



→ Tilt-Down Wall Mounted Poles

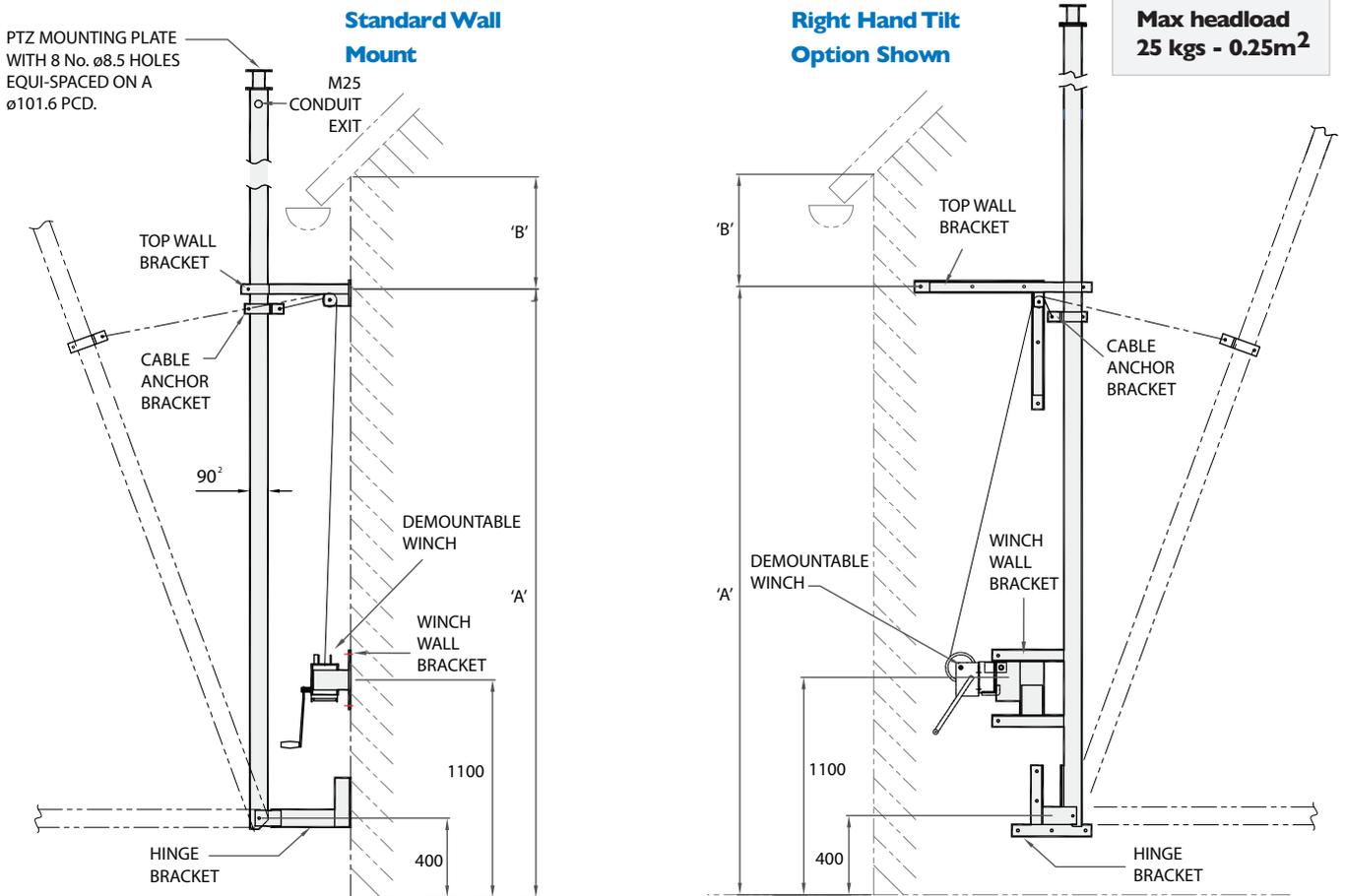
Features of Wall Mounted Tilt-Down Poles

Altron Tilt-down wall mounted poles offer a solution to virtually any location and head load where a tilt-down wall mounted pole is suitable, for gaining an elevated viewpoint from an existing structure. Bespoke mounting brackets can be provided to suit site specific requirements.

- Comprehensive standard range to suit most applications
- All Altron standard accessories available
- Hot dip galvanised for longevity
- Bespoke fixing brackets for non-standard situations

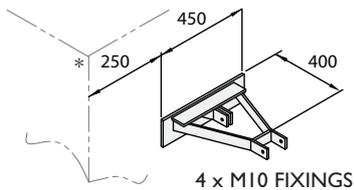
AW1934 Wall Mounted Tilt-Down Poles

For single or two storey walls, giving a cost effective solution. Demountable winches are included for added security.

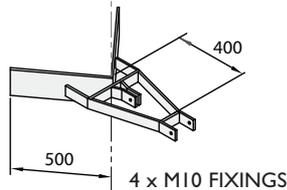


Mounting Bracket Options

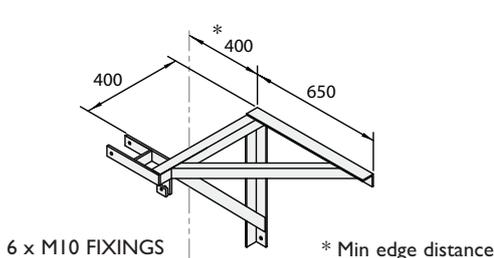
Wall Mount



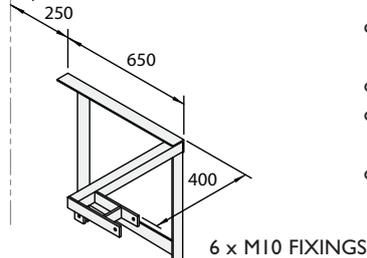
Corner Mount



Left Hand Tilt



Right Hand Tilt



Pole Height	Part No.	Dim A		B min
		min	max	
3	AW1934/3	1.5	2.5m	0.3m
4	● AW1934/4	2	4m	0.3m
5	● AW1934/5	2.5	4m	0.4m
6	● AW1934/6	3	5m	0.4m
7	AW1934/7	3.5	6m	0.5m
8	AW1934/8	4	7 m	0.5m

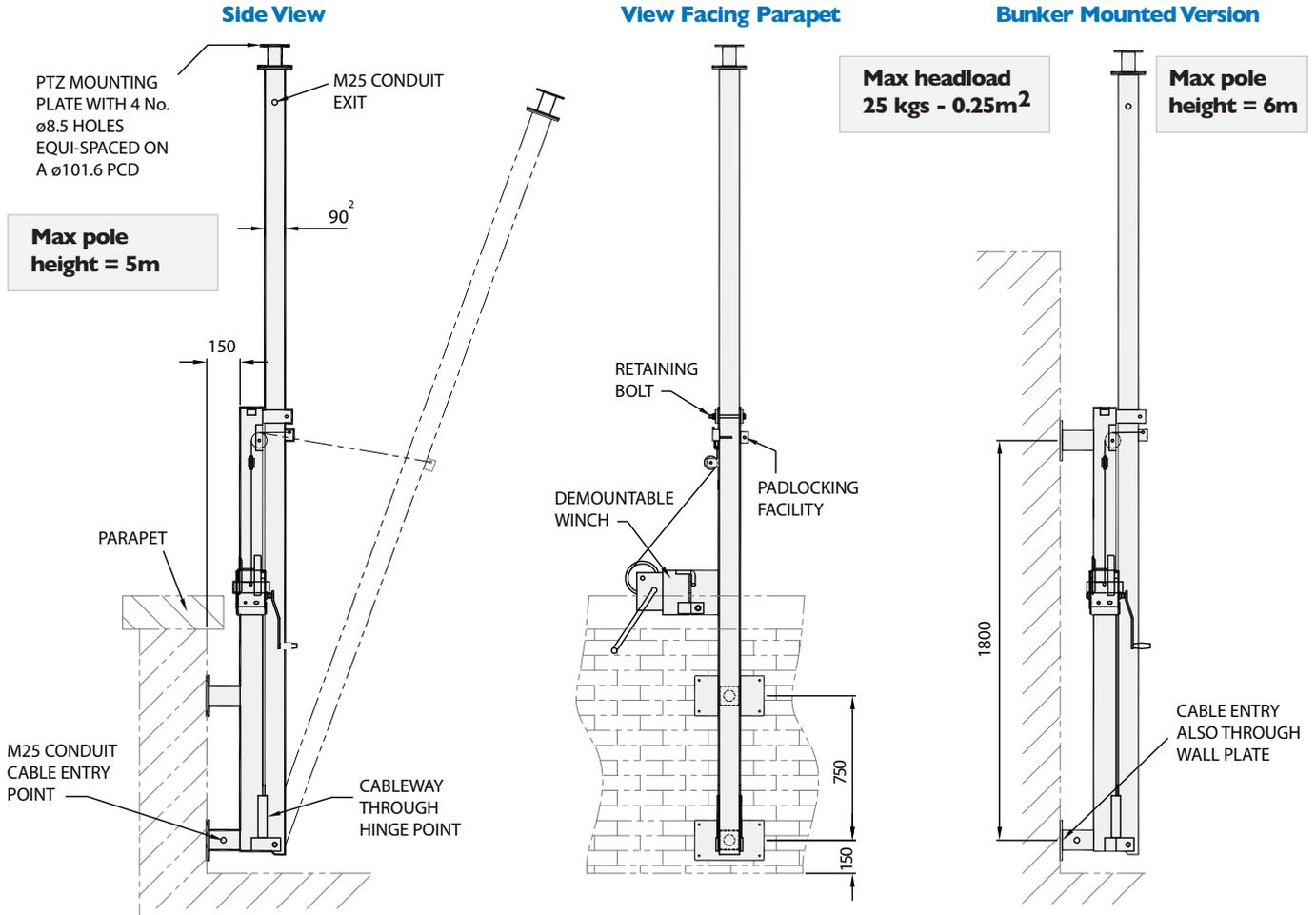
● Stock items

- For left hand tilt & right hand tilt suffix part number /LHT or /RHT e.g AW1934/4/LHT
- For corner mount suffix part number /C
- Dimension 'A' to be maintained for camera stability and to limit winch loading
- Dimension 'B' to be maintained for upper bracket fixing strength

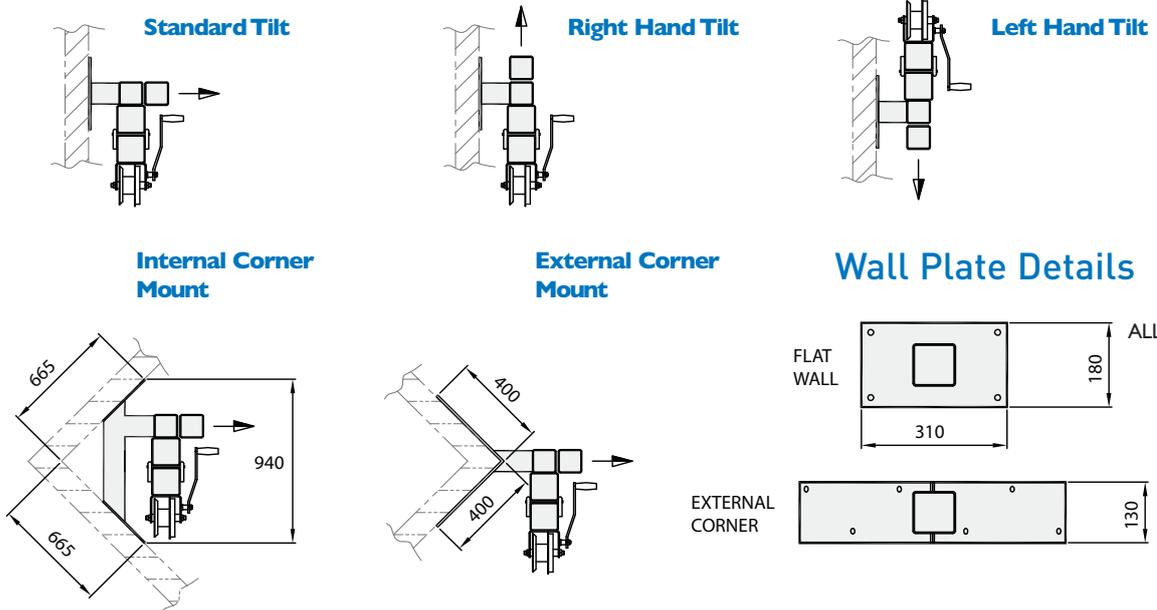
Tilt-Down Wall Mounted Poles ←

AW1980 Parapet Mounted Tilt-Down Poles

AW1980 parapet mounted tilt-down poles, give additional height from a standard parapet of suitable construction. Demountable winches and the facility to padlock make this product suitable for public areas, such as multi-storey car park roof levels. A roof 'bunker' mounted version is also available.



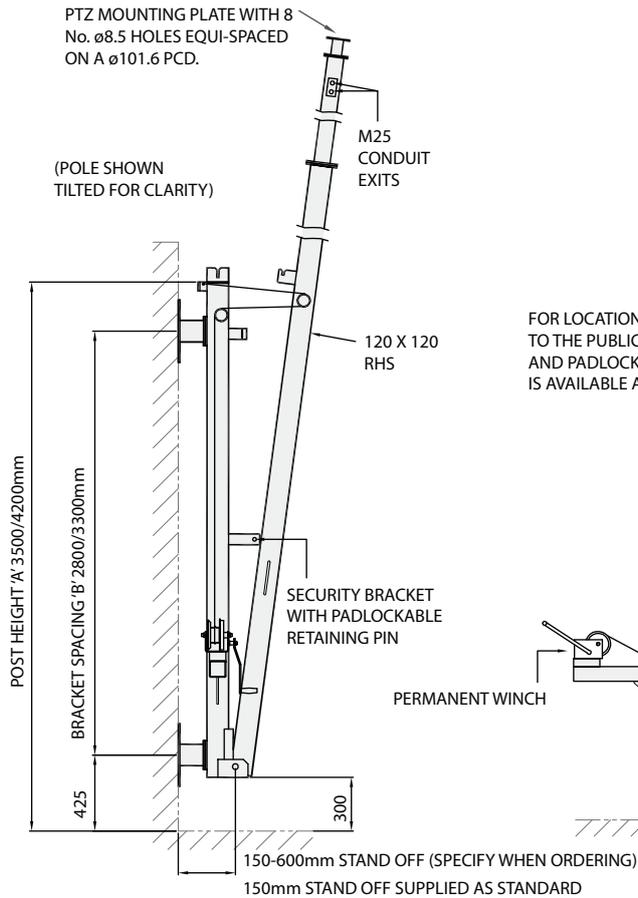
Mounting Bracket Options



→ Tilt-Down Wall Mounted Poles

AW4772 High Loading Wall-Mounted Tilt-Down Pole

Typically for dual camera and lighting installations, this range can be operated safely without the need to access a high level locking bolt, utilising a high level latch operated from ground level. Winches are fixed and can be supplied with padlockable cover and cable guard.

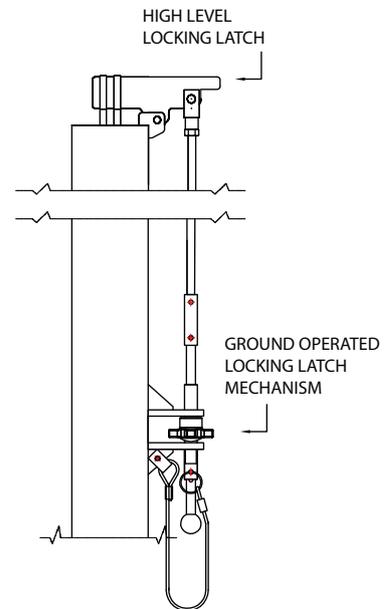


Guidance for Equipment Loading

Total Height (m)	Part No.	Wind surface area of equipment	Weight of equipment (kgs)	Post height 'A'	Bracket spacing 'B'
4	AW4772/4	0.75 m ²	75	3500 mm	2800 mm
5	AW4772/5	0.75 m ²	75	3500 mm	2800 mm
6	AW4772/6	0.65 m ²	70	4200 mm	3300 mm
7	AW4772/7	0.5 m ²	55	4200 mm	3300 mm
8	AW4772/8	0.4 m ²	40	4200 mm	3300 mm

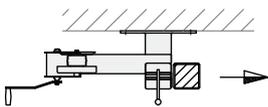
- For left hand tilt & right hand tilt suffix part number /LHT or /RHT e.g AW4772/5/LHT
- For corner mount suffix part number /C
- Bracket spacing can be altered to suit site conditions depending on suitability of structure
- Optional winch cable guard
- Optional padlockable winch housing

Uplatch Detail

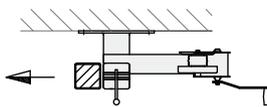


Mounting Bracket Options

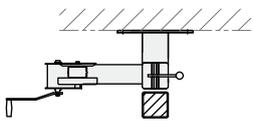
Right Hand Tilt



Left Hand Tilt

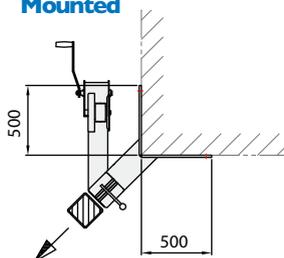


Standard Wall Mounted

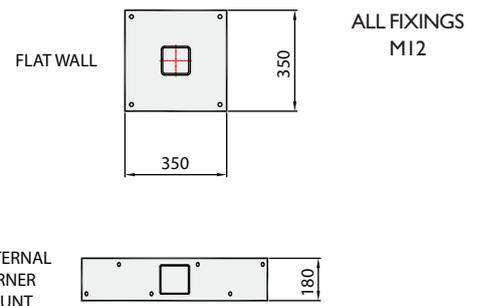


*ALSO AVAILABLE WITH RIGHT HAND WINCH MOUNTING

Standard Corner Mounted



Wall Plate Details



Wall Mounted Brackets ←



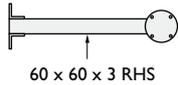
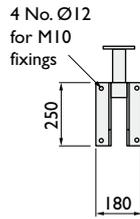
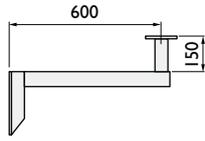
A comprehensive range of brackets to suit most common requirements, with a large amount of stock held. For installations where a standard bracket is not suitable, then we produce modified bracket designs and bespoke brackets on a fast turnaround.

→ Wall Mounted Brackets

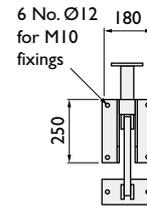
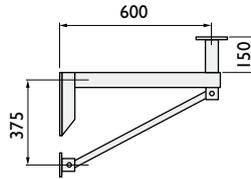
Flat Wall Mounting Brackets

● Stock items

● **WB1** Standard wall bracket



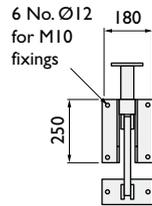
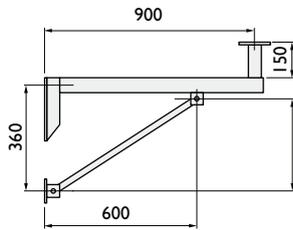
● **WB2** Heavy duty wall bracket



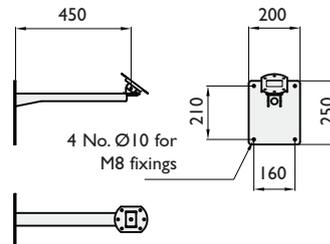
Load capacities

WB1 Load capacity 25kgs
WB2 Max load capacity 40kgs

● **WB2-900** Extended wall bracket



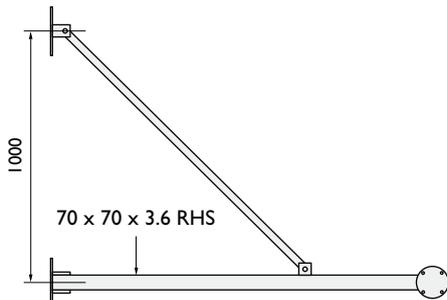
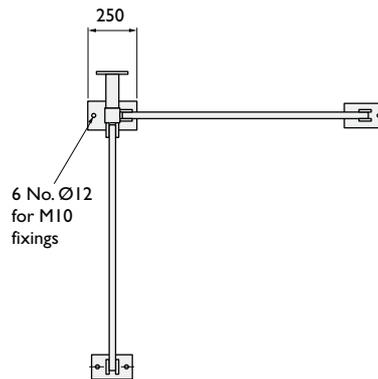
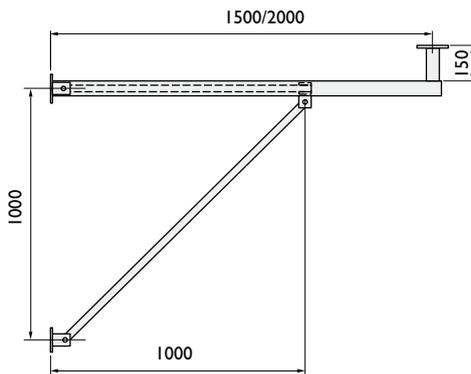
● **WB1-F** Fixed camera wall bracket



Load capacities

WB2-900 Max load capacity 25kgs
WB1-F Load capacity **PTS-I** 10kgs
HAS-I 20kgs

AW1705 Extended wall bracket



Load capacity 25kgs

Outreach	Part No.
1500 mm	● AW1705/1500
2000 mm	AW1705/2000

● Stock items

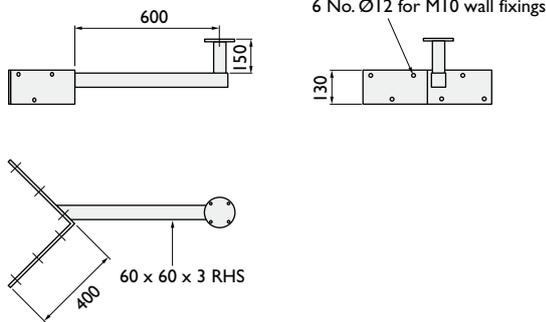
- Other outreach sizes made to order
- Also available for dome mounting

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

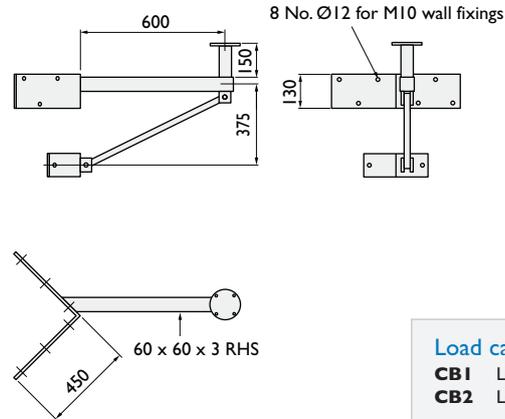
● Stock items

Corner Wall Mounting Brackets

- **CBI**
Standard corner wall bracket

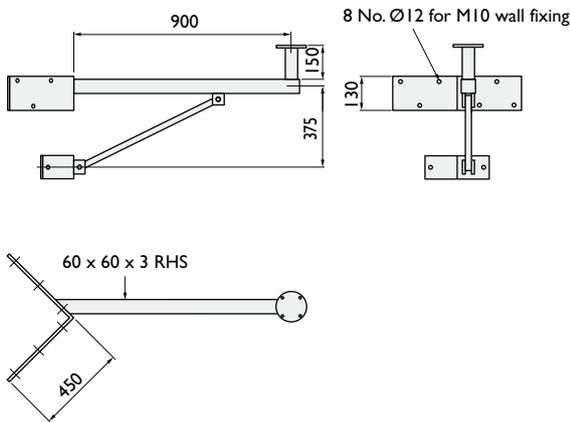


- **CB2**
Heavy duty corner wall bracket

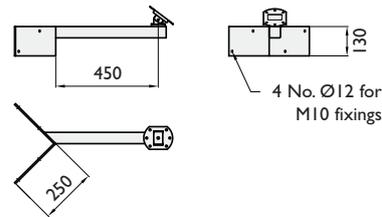


Load capacities
CBI Load capacity 25kgs
CB2 Load capacity 40kgs

- **CB2-900**
Extended corner wall bracket

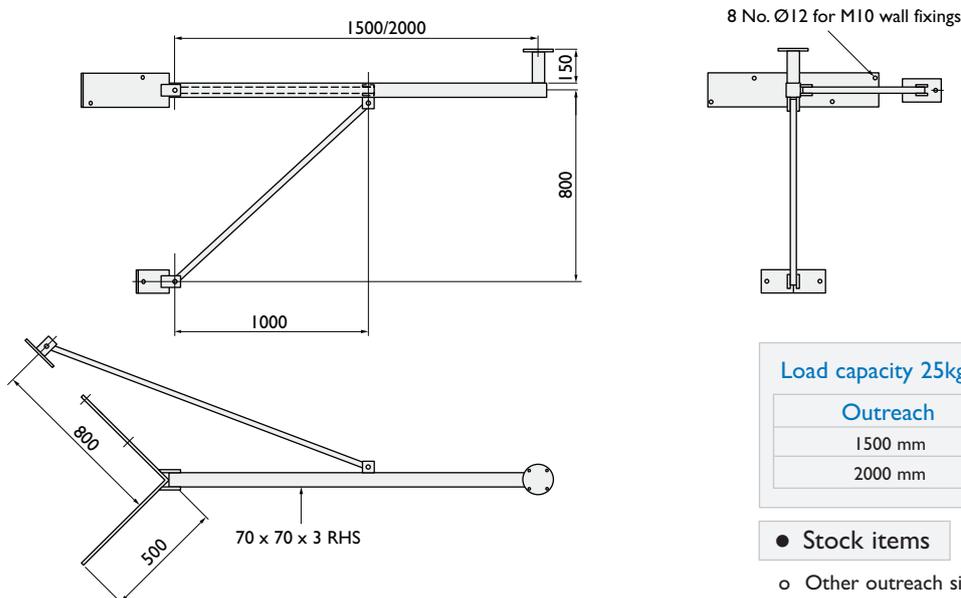


- **CBI-F**
Fixed camera corner wall bracket



Load capacities
CB2-900 Max load capacity 25kgs
CBI-F Load capacity **PTS-I** 10kgs
HAS-I 20kgs

- **AW1705/C**
Extended corner wall bracket



Load capacity 25kgs

Outreach	Part No.
1500 mm	● AW1705/1500/C
2000 mm	AW1705/2000/C

● Stock items

- Other outreach sizes made to order
- Also available for dome mounting

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Wall & Corner Mounted Dome Brackets

The Altron range of wall brackets for mounting domes is versatile and can be produced to suit any dome type. Standard mounting variations suit most installations, but if you have an installation that requires something non-standard, then we produce bespoke brackets to suit your specific requirement.

We stock components to suit the following manufacturers domes.

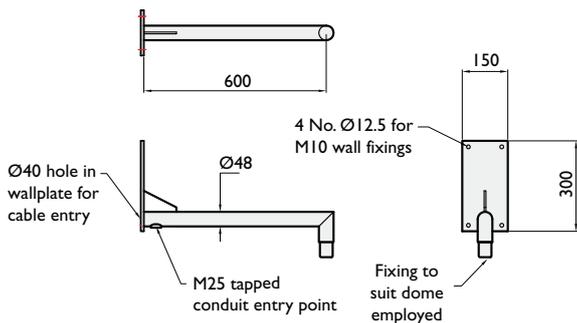
- | | | | |
|--------------------|------------------|-------------------|------------|
| - Bosch | - Mic I | - Samsung Techwin | - Vicon |
| - Dedicated Micros | - Molynx/Bewator | - Siemens | - Vista |
| - Honeywell | - Panasonic | - Sony | - Videotec |
| - JVC | - Pelco | - Tyco/ AD | |
| - Mark Mercer | - Philips | - Ultrak | |

- o Please specify dome type when ordering
- o All other manufacturers dome fittings made to order

Wall & Corner Dome Mounting Brackets

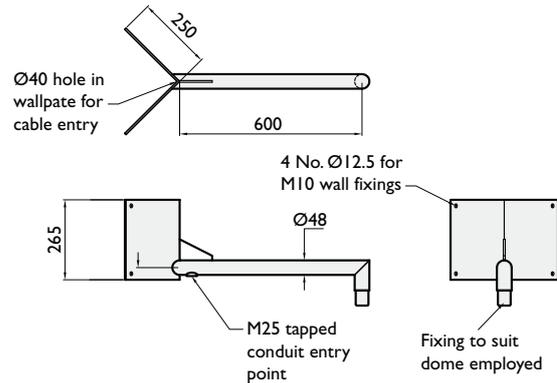
WBI-D

Wall mount standard



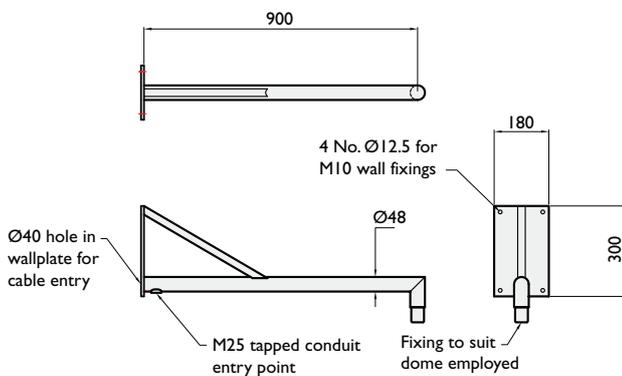
CBI-D

Corner mount standard



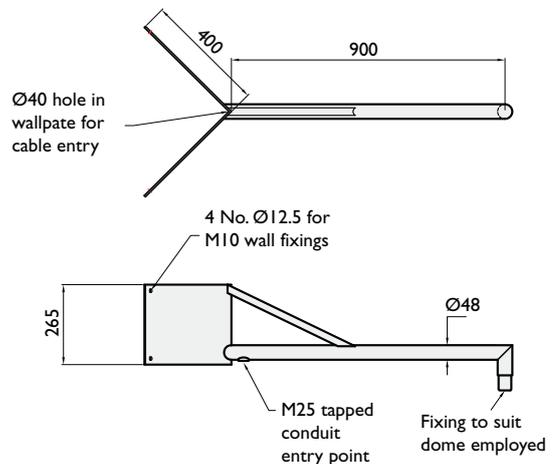
WB2-900-D

Extended Wall mount



CB2-900-D

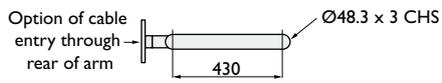
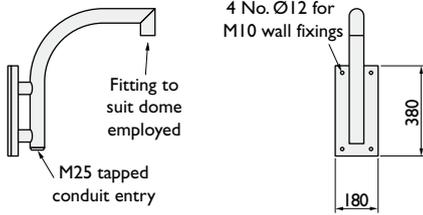
Extended Corner mount



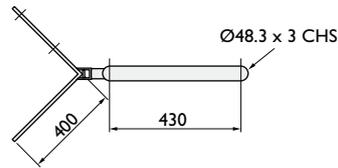
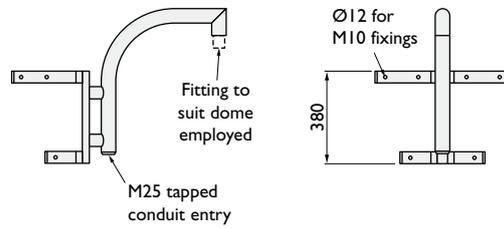
Wall & Corner Swan Neck Brackets

HALF

W-1699/H
Flat Wall mount

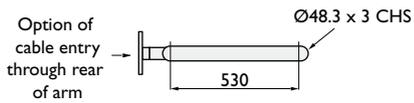
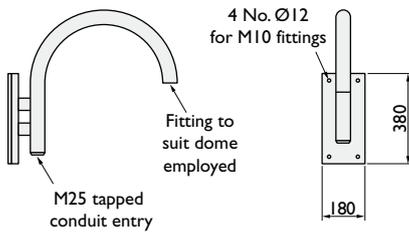


C-1699/H
Corner mount

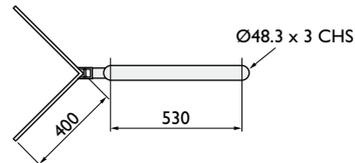
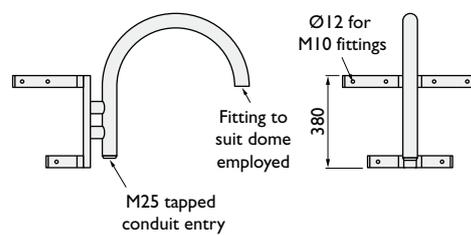


FULL

W-1699/F
Flat Wall mount



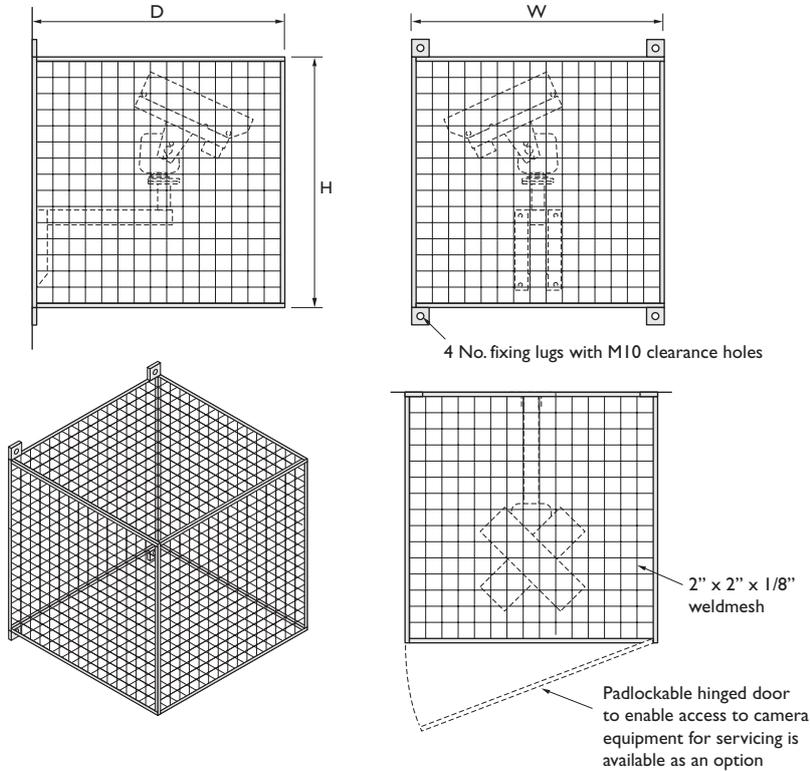
C-1699/F
Corner mount



→ Wall Mounted Brackets

Wall Mounted Cages

Flat wall mounted cage



Cage type	Part No.
Fixed camera without door	● AFC
Fixed camera with door	● AFC/D
PTZ camera without door	PAC
PTZ camera with door	PAC/D

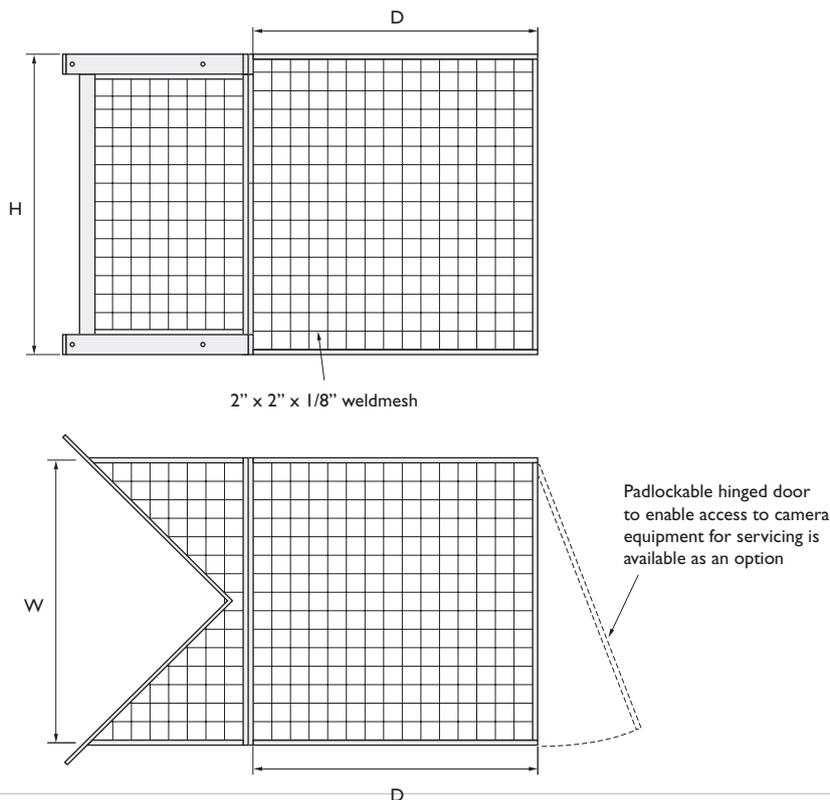
Typical Dimensions

	D	H	W
Fixed camera	600	600	600
PTZ camera	1100	1100	700

● Stock items

- Cages can be painted matt black over galvanising to reduce I/R reflection.
- Dimensions are typical and can vary to suit application. Please specify.

Corner mounted cage



Cage type	Part No.
Fixed camera without door	C-AFC
Fixed camera with door	C-AFC/D
PTZ camera without door	C-PAC
PTZ camera with door	C-PAC/D

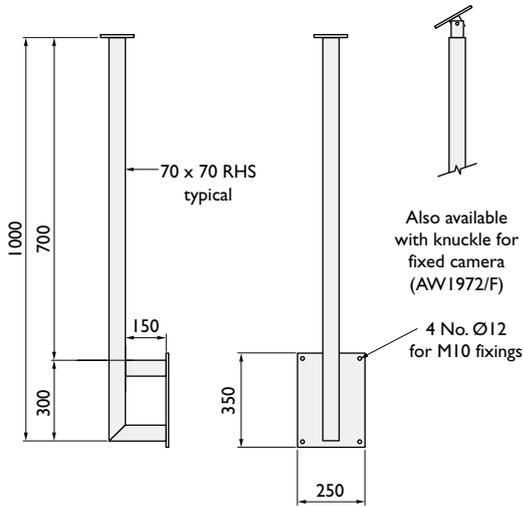
Typical Dimensions

	D	H	W
Fixed camera	600	420	600
PTZ camera	650	500	1100

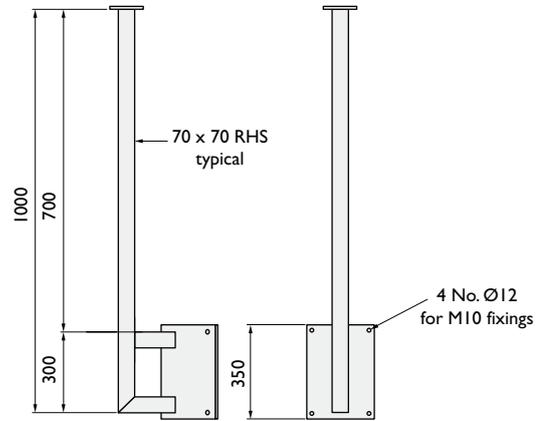
- Cages can be painted matt black over galvanising to reduce I/R reflection.
- Dimensions are typical and can vary to suit application. Please specify.

Upstand Wall Brackets

AW1972
Wall mount



AW1972/C
Corner mount



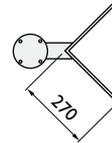
Wall Mount

PTZ camera ● **AW1972 SPT**
Fixed camera ● **AW1972 SF**

● Stock items

Load Capacities

For PTZ Load capacity 25kgs
For Fixed Load capacity **PTS-I** 10kgs
HAS-I 25kgs

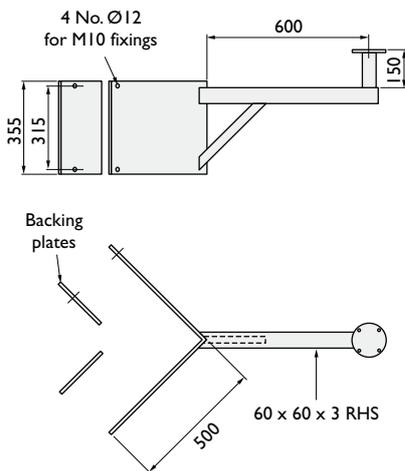


Corner Mount

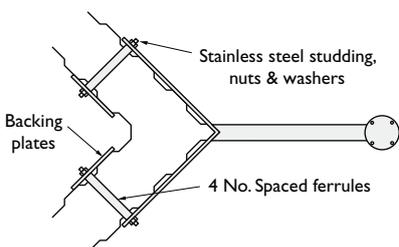
PTZ camera **AW1972/C SPT**
Fixed camera **AW1972/C SF**

Standard brackets are as shown, but brackets with upstand up to 2 metres and stand-off of 500mm can be produced to order

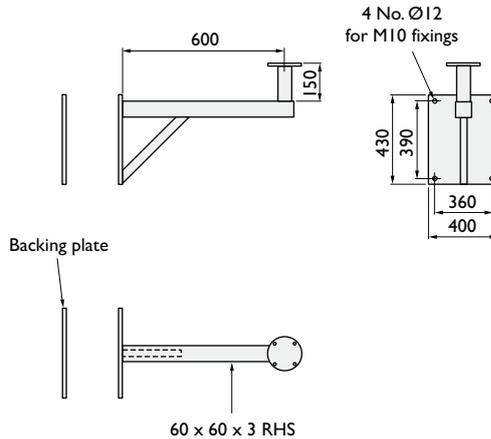
CB2/C
Corner



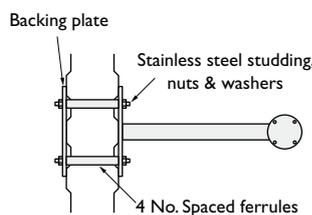
Fixing arrangement



WB2/C
Flat



Fixing arrangement



Load Capacities

CB2/C Load capacity 25kgs
WB2/C Load capacity 25kgs

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

→ Pole & Tower Accessories



All of our pole and tower ranges are backed up with a wide range of standard mounting accessories giving an appropriate and professional installation. Most items are held in stock and variations are available on a short lead time.

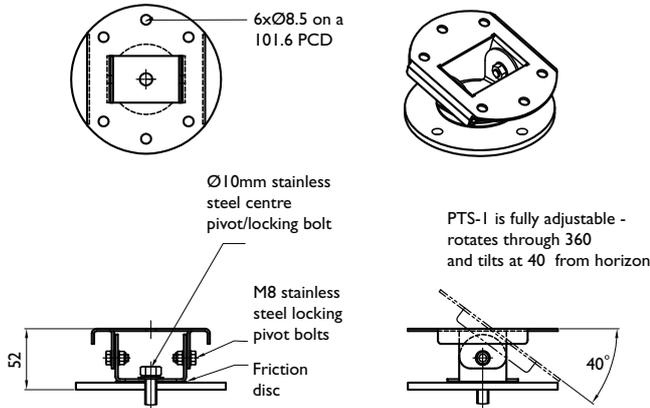
● Stock items

TB Brackets & Fixed Camera Knuckles

● PTS-I

Standard fixed camera knuckle

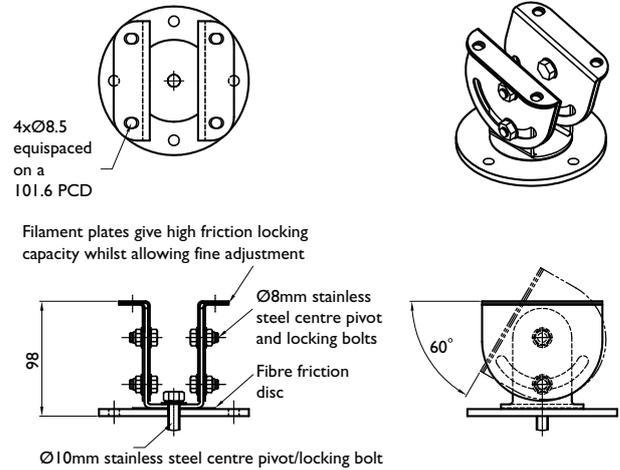
- Load rating 10Kgs
- General duty adjustable knuckle for mounting fixed cameras - robust & economic



● HAS-I

High specification fixed camera knuckle

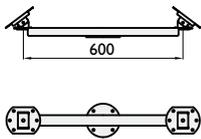
- Load rating 25Kgs
- High specification adjustable knuckle where fine adjustment and a solid platform are required to ensure accurate reliable camera alignment



As standard, TB brackets are supplied with PTS-I knuckles. Brackets supplied with HAS-I knuckles fitted as option

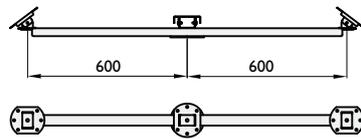
● TB2-600F

Twin fixed



● TB3-600F

Triple fixed



Knuckles mounted on TB bracket arms



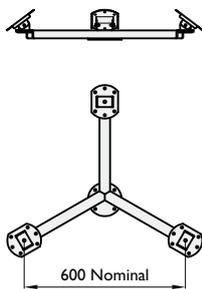
PTS-I



HAS-I

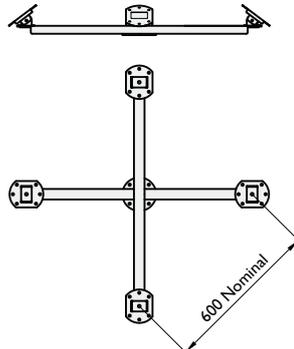
● TB3-600FM

Triple fixed manx



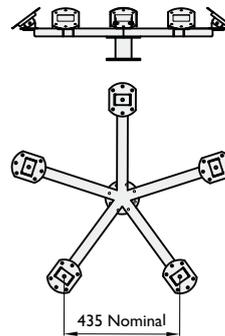
● TB4-600F

Quadruple fixed



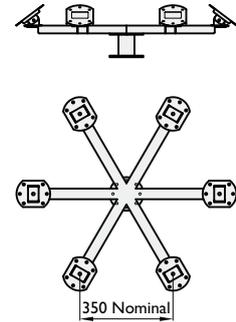
● TB5-600F

Five way fixed



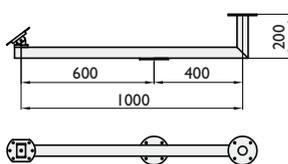
● TB6-600F

Six way fixed



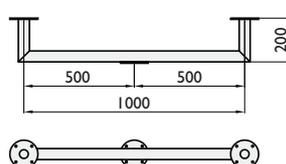
● TB2-1000SF/SPT

Single fixed & PTZ



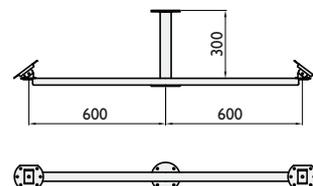
● TB2-1000

Twin PTZ



● TB3-600 SPT/TF

Twin fixed/single PTZ



All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

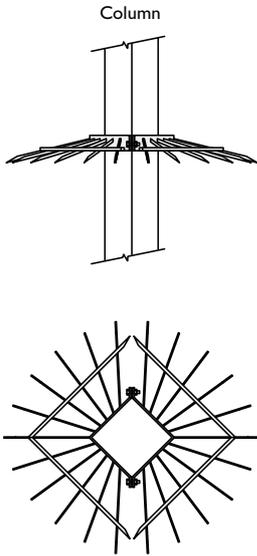
→ Pole & Tower Accessories

Anti Climb Guards

● Stock items

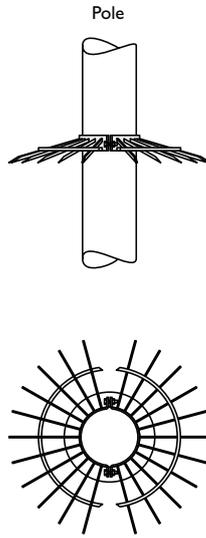
● SGC/SGP

Followed by column or wall mounted pole type
e.g. for ACCIFB = SGC1 / For ACP2 = SGP2



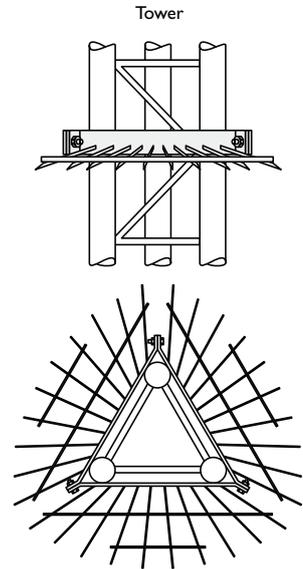
● SGP (Ø*)

Followed by * pole diameter
e.g. for Ø139 pole = SGP/139



● SGT

Followed by tower type
e.g. for ACT2BP = SGT/2



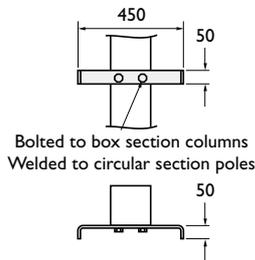
Available for pole diameters

Ø76
Ø89
Ø114
Ø139
Ø168
Ø193
Ø219
Ø273

Ladder Stays

● LSI

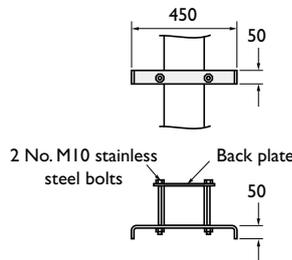
Purchased with pole or column



Bolted to box section columns
Welded to circular section poles

● LSI/C

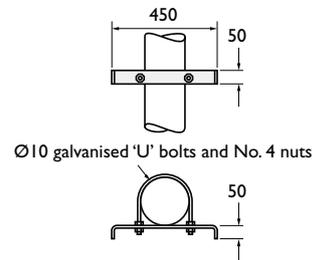
Retro fit for box section columns
Followed by column type or size
e.g. LSI/C/ACCIFB



2 No. M10 stainless steel bolts
Back plate

● LSI/P

Retro fit for tubular pole
Followed by pole diameter
e.g. LSI/P139

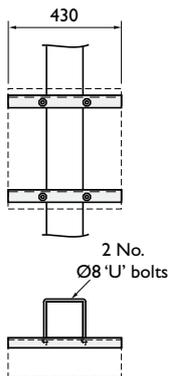


Ø10 galvanised 'U' bolts and No. 4 nuts

Adjustable Telemetry Receiver Brackets

● ATBC/ATBP

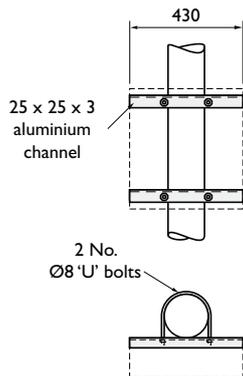
Followed by column type or size. ATBC for column. ATBP for wall mounted pole
e.g. ATBC/1



2 No. Ø8 'U' bolts

● ATBC

Followed by pole diameter
e.g. ATBC/139

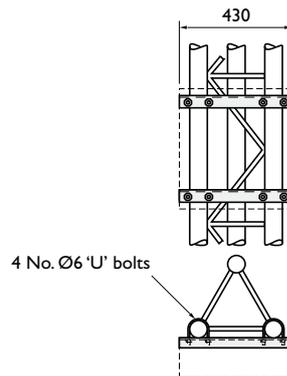


25 x 25 x 3 aluminium channel

2 No. Ø8 'U' bolts

● ATBT

Followed by tower type
e.g. ATBT/2



4 No. Ø6 'U' bolts

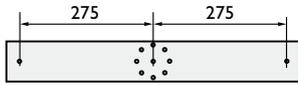
Fitting adjustable telemetry receiver bracket

1. Drill aluminium channels to fit hole centre on receiver box (one channel across the bottom, one across the top)
2. Bolt channels to the box
3. Trim channels to the width of the box using hacksaw
4. Bolt the box to the column/pole/tower using the 'U' bolts supplied

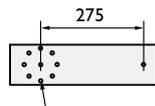
● Stock items

I/R Lamp Mounting Brackets

- **SP2**
Twin mounting bracket

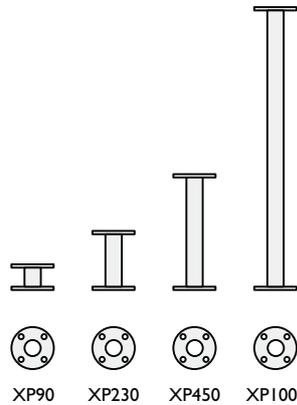


- **SP1**
Single mounting bracket



8 No. Ø8.5 equi-spaced on 101.6 PCD

Column Spacers



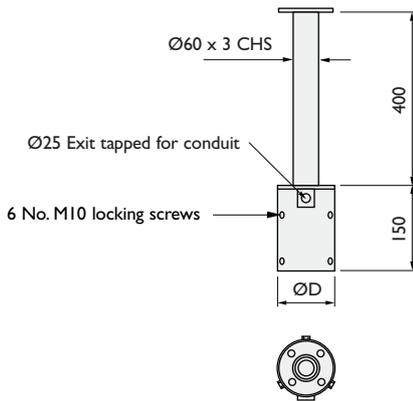
Part No.	Column Spacer Height
● XP 90	90mm 3 1/2 inches
● XP 150	150mm 6 inches
● XP 230	230mm 9 inches
● XP 300	300mm 12 inches
● XP 380	380mm 15 inches
● XP 450	450mm 18 inches
● XP 600	600mm 24 inches
● XP 1000	1000mm 39 inches

● Stock items

- We can produce column spacers to suit any camera mounting type or application

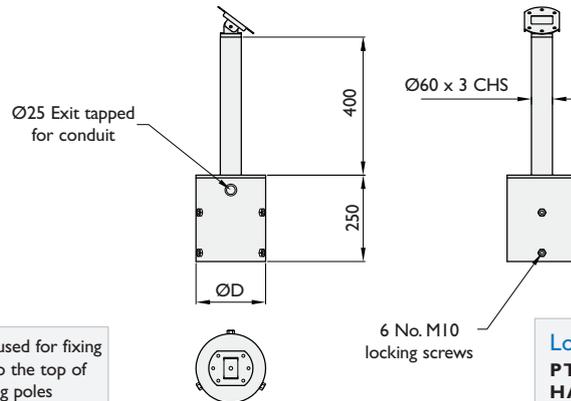
Pole Top Mounting Brackets

- **PMBT (Ø*) SPT** (*Pole diameter)
Pole top mounting bracket for PTZ camera



Commonly used for fixing cameras to the top of lighting poles

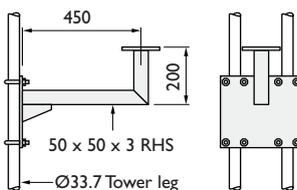
- **PMBT (Ø*) SF** (*Pole diameter)
Pole top mounting bracket for fixed camera



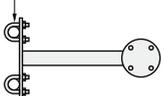
Load Capacities	
PTS-I	10kgs
HAS-I	25kgs

Column & Tower Mounting Brackets

- **TMB-SPT**
Tower leg mounting bracket for PTZ camera

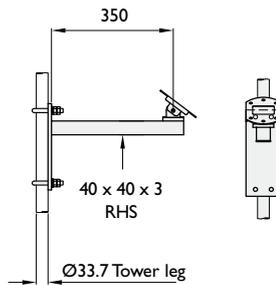


4 No. heavy duty galvanised 'U' bolts



Load capacity 25kgs depending on tower spare capacity

- **TMB-SF**
Tower leg mounting bracket for fixed camera

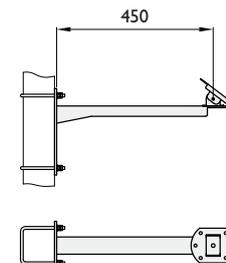


2 No. heavy duty galvanised 'U' bolts



Load Capacities	
PTS-I	10kgs
HAS-I	20kgs

- **CMB-SF**
Pole mounting bracket for box section column fixed camera
PTZ version also available



Stainless steel 'U' bolts to suit box section size

Part No.	Box Section Size
● CMB 70SF	70 x 70
● CMB 80SF	80 x 80
● CMB 90SF	90 x 90
● CMB 100SF	100 x 100
CMB 120SF	120 x 120
CMB 150SF	150 x 150
CMB 200SF	200 x 200

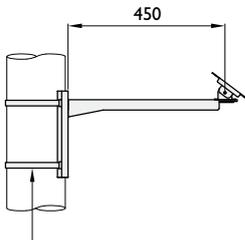
● Stock items

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

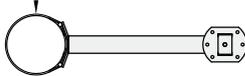
→ Pole & Tower Accessories

Adjustable Pole Mounting Brackets

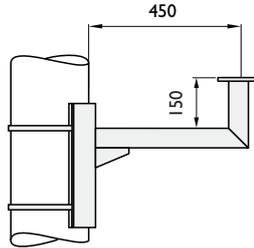
APB-SF



Heavy 16mm stainless steel strapping grade 304



APB-SPT



Load capacities PMB/APB

	PTS-I	HAS-I
For Fixed	10 Kgs	20 Kgs
For PTZ	25 Kgs	

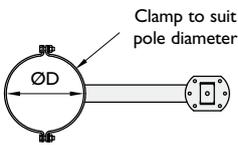
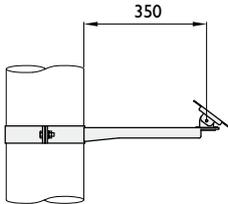
Part No.	Housing Type	Pole Diameter
● APB 150 SF	Single fixed	75-150
● APB 150 TF	Twin fixed	75-150
● APB 150 SPT	Single PTZ	75-150
● APB 150 TPT	Twin PTZ	75-150
● APB 250 SF	Single fixed	150-250
● APB 250 TF	Twin fixed	150-250
● APB 250 SPT	Single PTZ	150-250
● APB 250 TPT	Twin PTZ	150-250

● Stock items

- Stainless steel strapping has a 1 tonne breaking strain
- Can also be produced for AWI699/H & AWI699/F swan necks

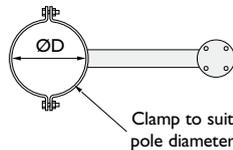
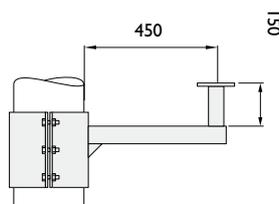
Pole Mounting Camera Brackets

PMB-SF



Clamp to suit pole diameter

PMB-SPT



Clamp to suit pole diameter

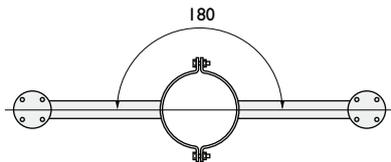
Part No.	Housing Type	Pole Diameter
● PMB (Ø*) SF	Single fixed	To be specified
● PMB (Ø*) TF	Twin fixed	To be specified
● PMB (Ø*) SPT	Single PTZ	To be specified
● PMB (Ø*) TPT	Twin PTZ	To be specified

* Followed by pole diameter

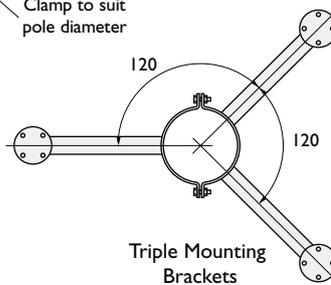
Other configurations and end fittings available on request

● Stock items for diameters 139, 168 & 219

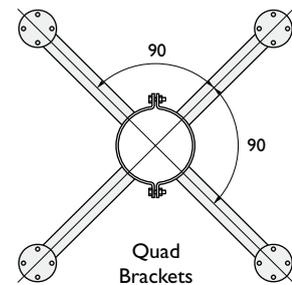
- We can produce pole mounting brackets to suit any camera type or application



Twin Mounting Brackets



Triple Mounting Brackets

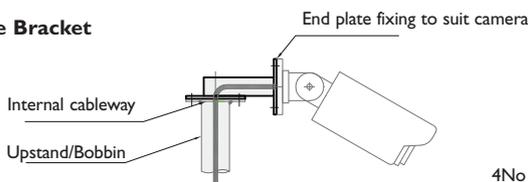


Quad Brackets

Bullet Camera Brackets

BCB-T

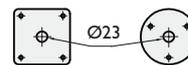
Single Bracket



Twin Bracket



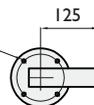
Examples of camera mount plates



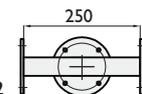
Mounting Options

4No Ø8.5 on a 101.6 PCD

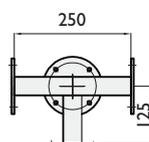
BCB-T1 Single



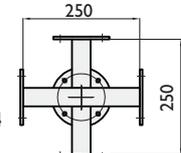
BCB-T2 Twin



BCB-T3 3 Way



BCB-T4 4 Way

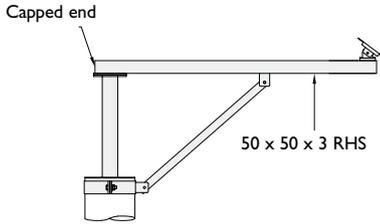


All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Offset Side Arms Brackets for Tubular Poles & Box Section Columns

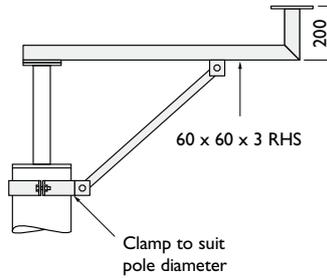
POBI (Ø*) SF

Pole top offset arm for fixed camera



POBI (Ø*) SPT

Pole top offset arm for PTZ camera



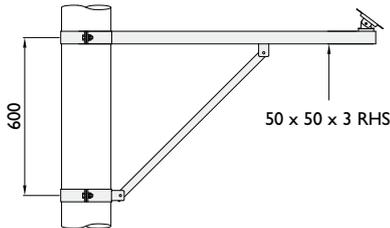
Part No.	Load capacity		
	For Fixed Cameras	PTS-I	HAS-I
● POBI (Ø*) 600/SF	10 Kgs	25 Kgs	
● POBI (Ø*) 1000/SF	10 Kgs	25 Kgs	
● POBI (Ø*) 1200/SF	10 Kgs	20 Kgs	
● POBI (Ø*) 1500/SF	10 Kgs	15 Kgs	
For PTZ Cameras		Load capacity	
● POBI (Ø*) 600/SPT		25 Kgs	
● POBI (Ø*) 1000/SPT		25 Kgs	
● POBI (Ø*) 1200/SPT		20 Kgs	
● POBI (Ø*) 1500/SPT		15 Kgs	

* Followed by pole diameter

● Stock items

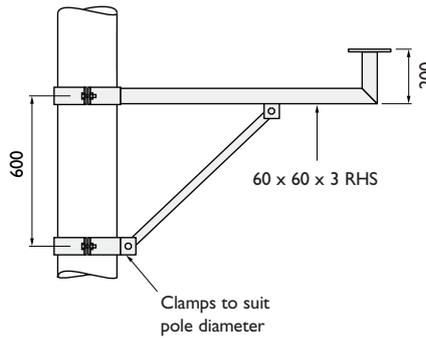
PMB (Ø*) SF

Pole mounting offset bracket for fixed camera



PMB (Ø*) SPT

Pole mounting offset bracket for pan & tilt camera



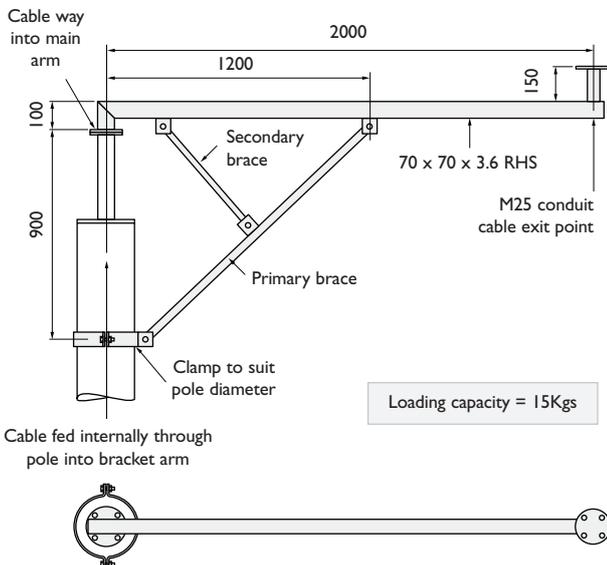
Part No.	Load capacity		
	For Fixed Cameras	PTS-I	HAS-I
● PMB (Ø*) 600/SF	10 Kgs	25 Kgs	
● PMB (Ø*) 1000/SF	10 Kgs	25 Kgs	
● PMB (Ø*) 1200/SF	10 Kgs	20 Kgs	
● PMB (Ø*) 1500/SF	10 Kgs	15 Kgs	
For PTZ Cameras		Load capacity	
● PMB (Ø*) 600/SPT		25 Kgs	
● PMB (Ø*) 1000/SPT		25 Kgs	
● PMB (Ø*) 1200/SPT		20 Kgs	
● PMB (Ø*) 1500/SPT		15 Kgs	

* Followed by pole diameter

● Stock items

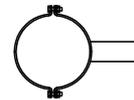
POBI-2000 SPT

Pole top 2m off set arm for pan & tilt camera

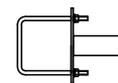


Loading capacity = 15Kgs

Bracket clamps for tubular poles (POB-PMB)



Bracket clamps for box section columns (COB-CMB)



All part numbers noted above are for brackets to fit tubular poles. For brackets to fit box section columns replace POM/PMB prefixes with COB/CMB. State column section size instead of pole diameter.

For extended offset brackets, it is important than on tilt down products, the arm is orientated in the direction of tilt. Please refer to P103 for full explanation.

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

Swan Neck & Dome Mounting Brackets

The Altron range of swan necks & dome mounting brackets are versatile and can be produced to suit any dome type. Standard mounting variations suit most installations, but if you have an installation that requires something non-standard, then we produce bespoke brackets to suit your specific requirement.

We stock components to suit the following manufacturers domes.

- Bosch
- Dedicated Micros
- Honeywell
- JVC
- Mark Mercer
- Mic I
- Molynx/Bewator
- Panasonic
- Pelco
- Philips
- Samsung Techwin
- Siemens
- Sony
- Tyco/ AD
- Ultrak
- Vicon
- Vista
- Videotec

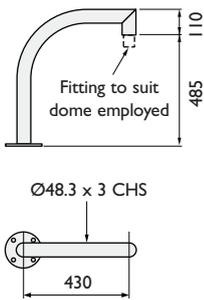
- o Please specify dome type when ordering
- o All other manufacturers dome fittings made to order

Swan Neck Brackets

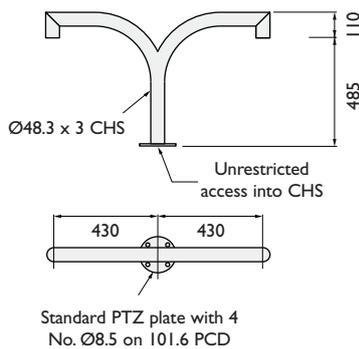
● Stock items

HALF

● AWI699/H Single

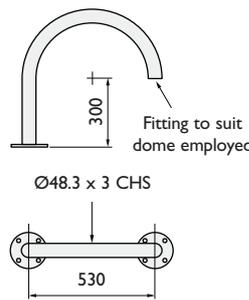


AWI699/TH Twin

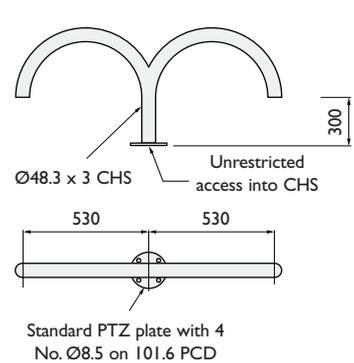


FULL

● AWI699/F Single



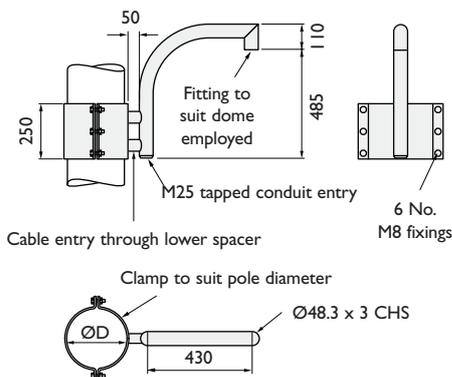
AWI699/TF Twin



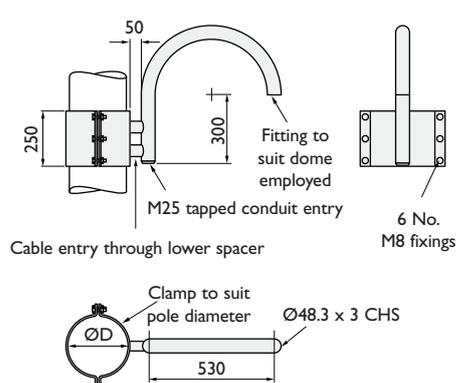
Triple & quad brackets available

Pole Mounted Swan Neck Brackets

PMB (Ø*) 1699/H (* Pole diameter) Pole mount half swan neck



PMB (Ø*) 1699/F (* Pole diameter) Pole mount full swan neck

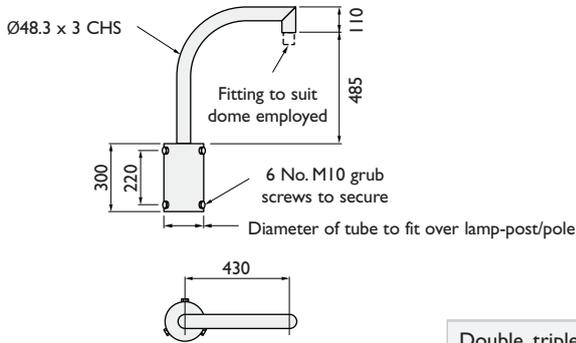


Double, triple & quad brackets available

Pole Top Mounted Swan Neck

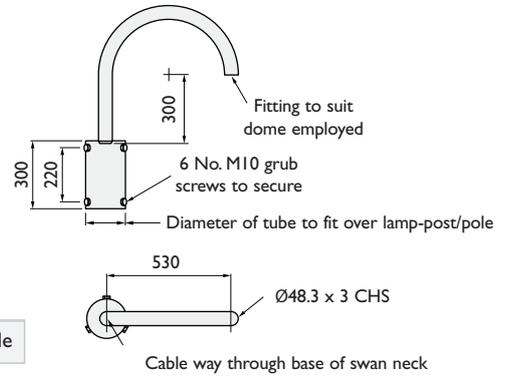
PT(Ø*) 1699/H (* Pole diameter)

Pole top mount half swan neck



PT(Ø*) 1699/F (* Pole diameter)

Pole top mount full swan neck



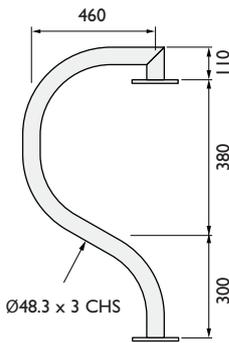
Double, triple & quad brackets available

Sweeping Swan Neck Brackets

AW1723

Sweeping swan neck

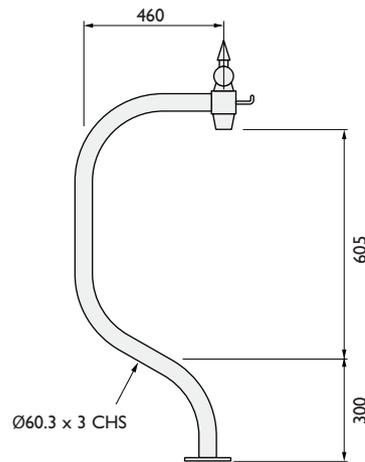
For 6 - 8" Domes



AW1723/OF

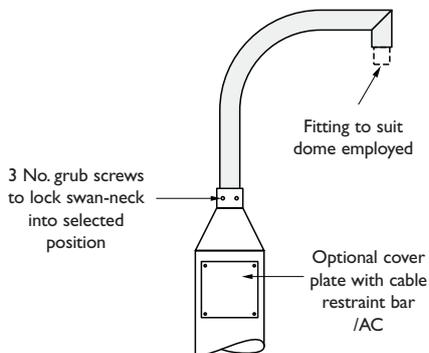
Sweeping swan neck

For 15 - 18" Domes (ornate option shown)

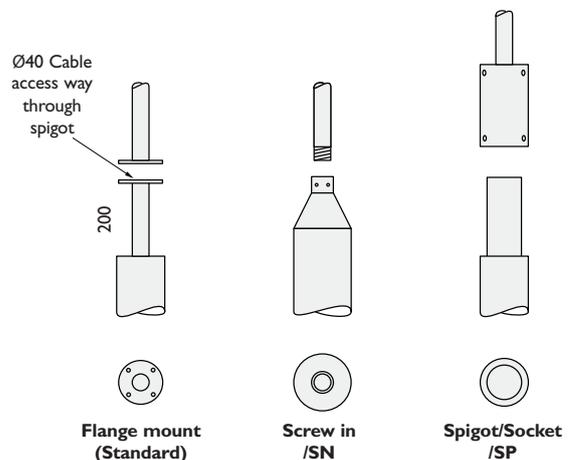


Detail of Swan Neck (Screw in)

Produces aesthetic connection of swan neck and enables 360° orientation

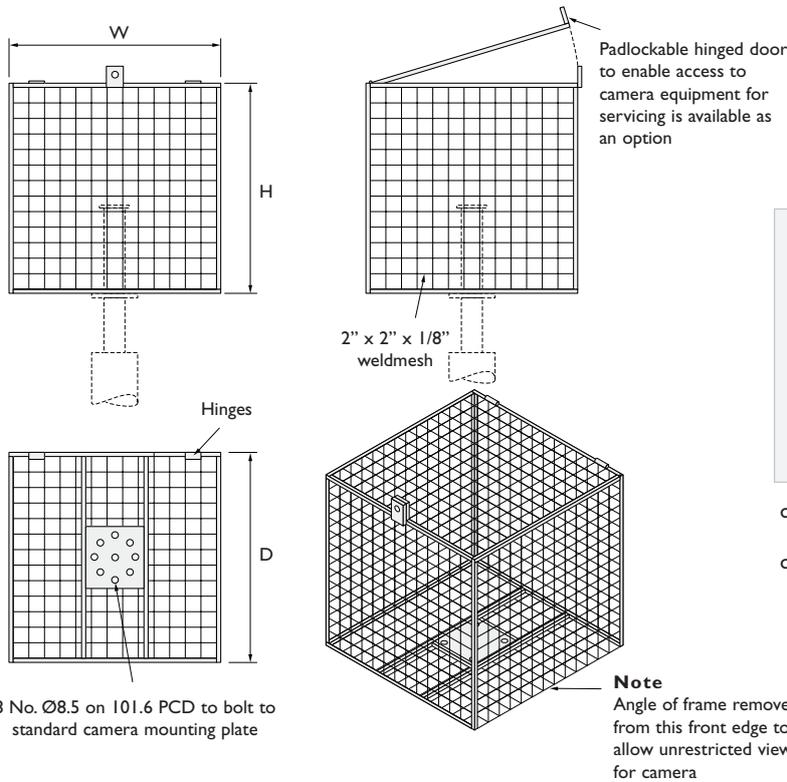


Fitting Option for Swan Necks



Pole Top Mounting Cages

Pole top mounted cage



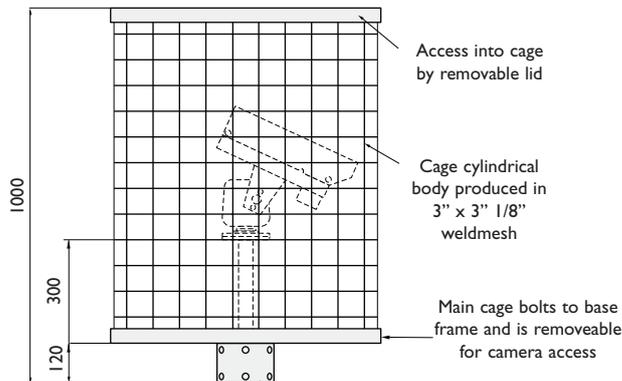
Cage type	Part No.
Fixed camera	AFCPT
PTZ camera	PACPT

Typical Dimensions

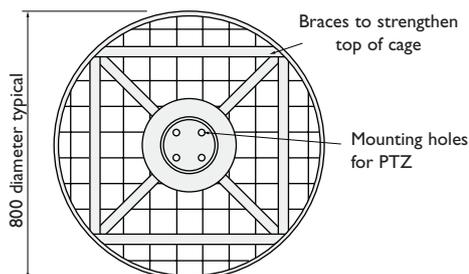
	D	H	W
Fixed camera	500	500	500
PTZ camera	1000	1000	1000

- o Cages can be painted matt black over galvanising to reduce I/R reflection.
- o Dimensions are typical and can vary to suit application. Please specify.

Cylindrical cage for pole top



Top hat fixing fits over top of pole and secured with 6No. bolts. Size made to suit pole diameter

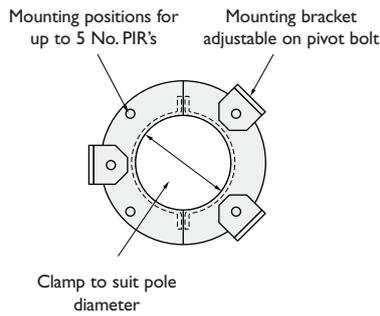
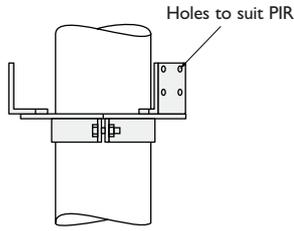


Cage Ø	Part No.
500	PACPT/500
800	PACPT/800
1000	PACPT/1000
1200	PACPT/1200

- o Cages can be painted matt black over galvanising to reduce I/R reflection
- o Diameter of cage to suit camera assembly housing

PIR Mounting Brackets

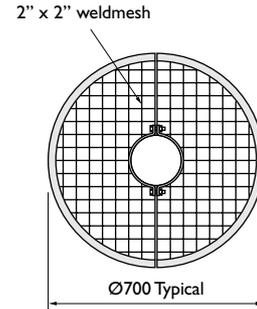
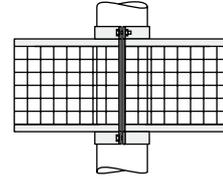
AW1962 PIR mount ring



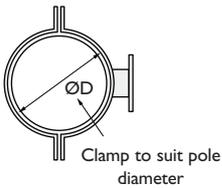
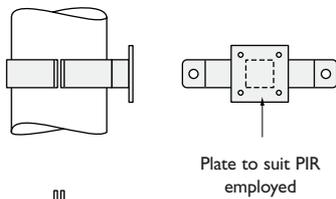
Part No.	Pole Diameter
AW1962/76	Ø76
AW1962/89	Ø89
AW1962/114	Ø114
AW1962/139	Ø139
AW1962/168	Ø168
AW1962/193	Ø193
AW1962/219	Ø219
AW1962/273	Ø273

● Stock items

AW1962/CG Cage enclosure for PIR mounting ring



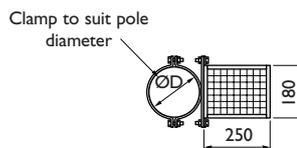
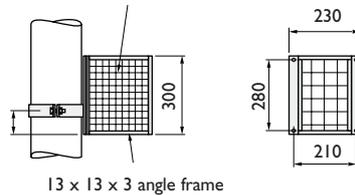
AW2274 Clamp-on PIR pole bracket



These can be doubled up back to back

AW1983 PIR bracket and cage

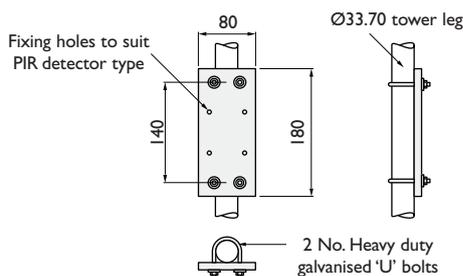
25 x 25 x 3 mesh on 4 sides only
50 x 50 x 3 on front face



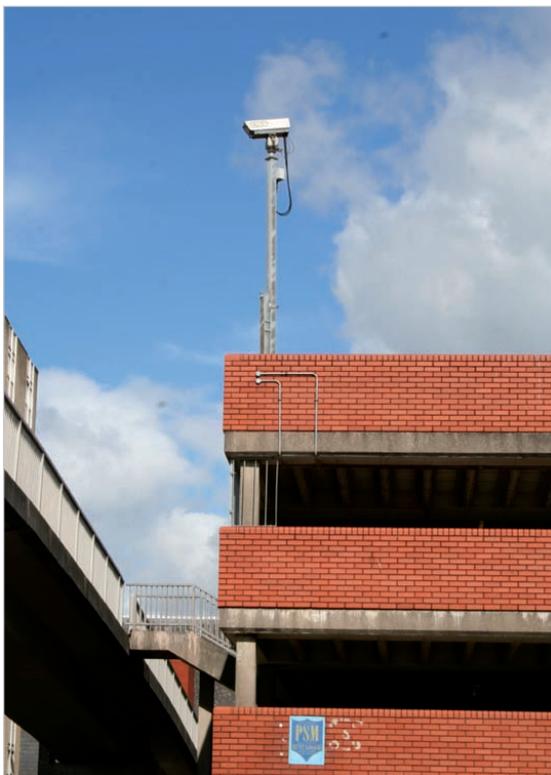
These can be doubled up back to back

Produced for all pole sizes as AW1962 mounting rings

AW2275 Clamp-on tower leg bracket for PIR



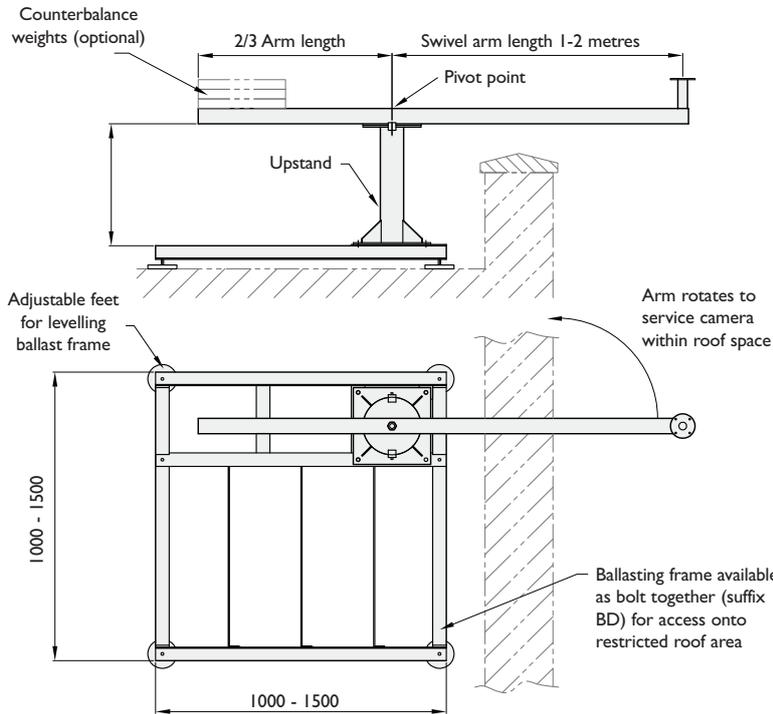
→ Roof Mounted Brackets



A common sight, protruding over parapets, our roof and parapet mounting brackets enable safe servicing of cameras within the roof space. Catering specifically for both PTZ and dome applications, most variations are available either from stock or on short lead times. For the many more unusual roof mounted installations, we provide a bespoke design service calling upon many years of experience, to overcome unusual mounting requests.

SBI-RM

Roof mounted swivel arm bracket



Swivel Arm Brackets

Arm Length	Pt No.
1m	● SBI-1000RM
1.2m	● SBI-1200RM
1.5m	● SBI-1500RM
2m	● SBI-2000RM

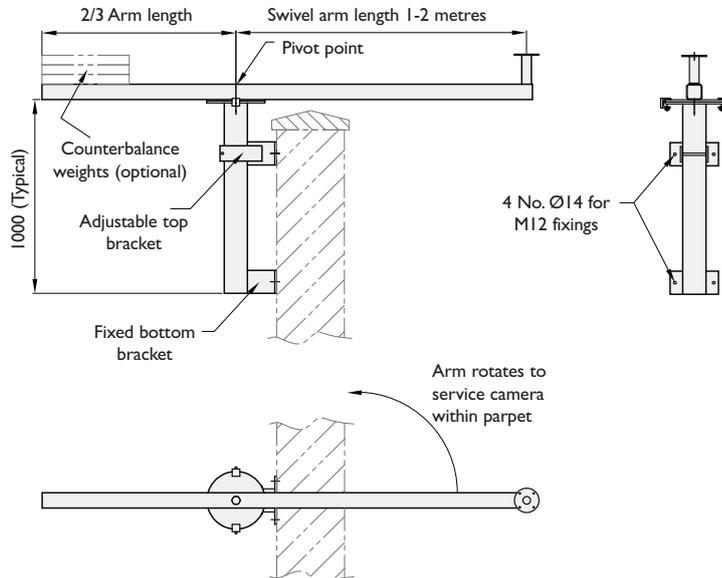
Upstand Heights Available

- 300 mm (supplied as standard)
- 600mm
- 1100mm
- Other sizes made to order
- Max. load capacity 25kgs
- Also available with bolt together frame (suffix BD) for access onto restricted roof areas
- Typical ballast amount 200 - 250kgs depending on arm length post height and location

● Stock items

SBI-PM

Parapet mounted swivel arm bracket

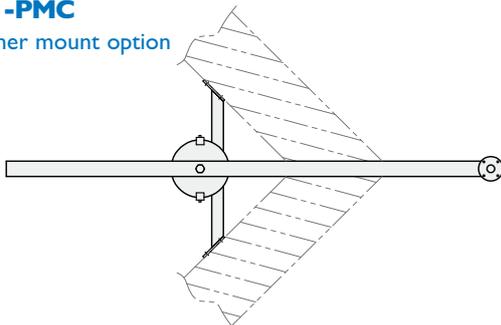


Arm Length	Pt No.
Flat Parapet Mount	
1m	● SBI-1000PM
1.2m	● SBI-1200PM
1.5m	● SBI-1500PM
2m	● SBI-2000PM
Corner Parapet Mount	
1m	● SBI-1000PMC
1.2m	● SBI-1200PMC
1.5m	● SBI-1500PMC
2m	● SBI-2000PMC

- Max. load capacity 25kgs
- Also available with integral cableway (suffix IC) so that all cabling is concealed within bracketry.

SBI-PMC

Corner mount option



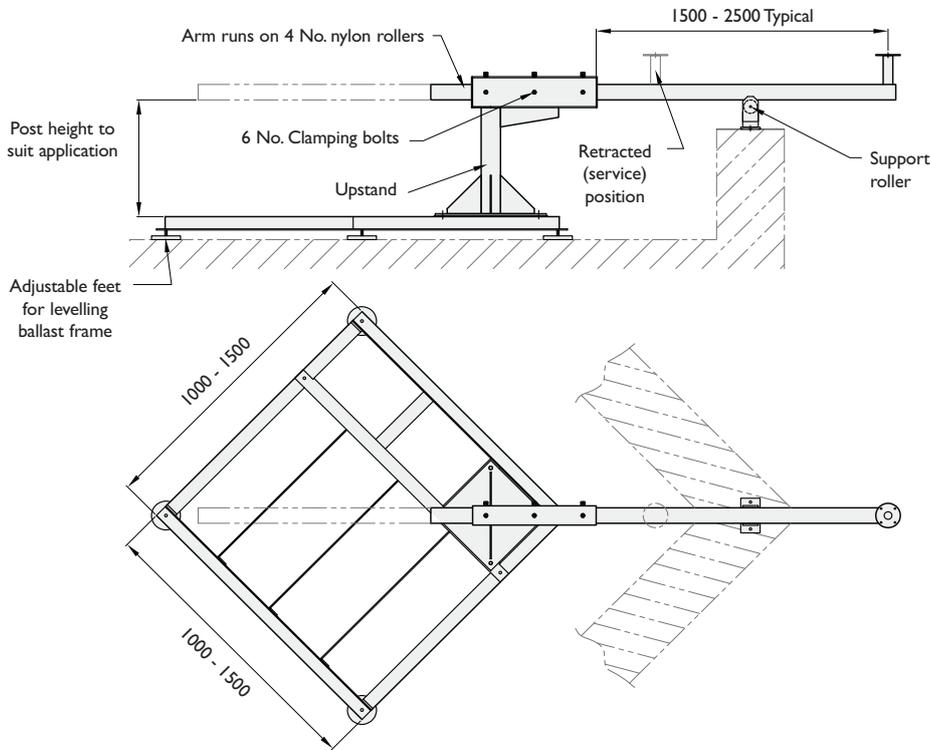
All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

→ Roof Mounted Brackets

Sliding Arm Brackets

SAI-RM

Roof mounted sliding arm bracket



Arm Length	Pt No.
1.5m	SAI-1500RM
2m	SAI-2000RM
2.5m	SAI-2500RM

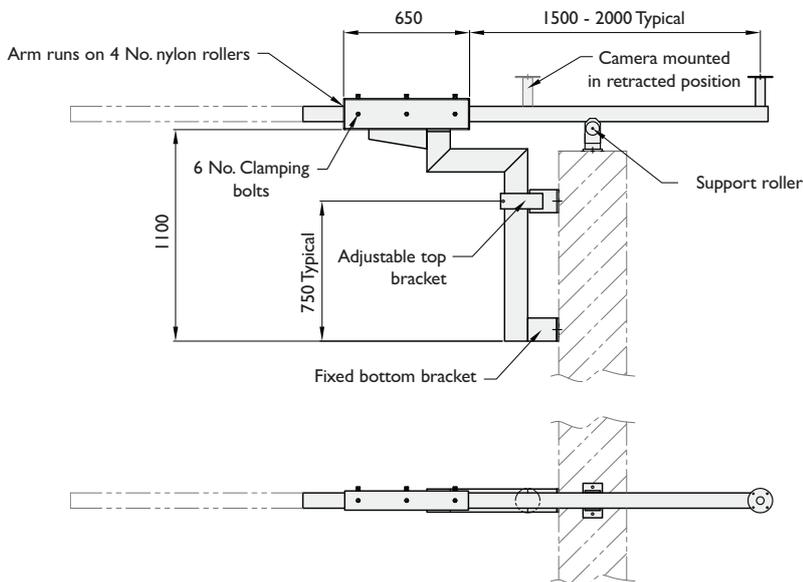
Upstand Heights Available

300 mm (supplied as standard)
600mm & 1100mm
Other sizes made to order

- o Available as flat mount as shown or corner mount
- o Also available with bolt together frame (suffix BD) for access onto restricted roof areas
- o Typical ballast amount 200 - 250kgs depending on arm length post height and location

SAI-PM

Parapet mounted sliding arm bracket



Arm Length	Pt No.
Flat Parapet Mount	
1m	SAI-1000PM
1.5m	SAI-1500PM
2m	SBI-2000PM
Corner Parapet Mount	
1m	SAI-1000PMC
1.5m	SAI-1500PMC
2m	SAI-2000PMC

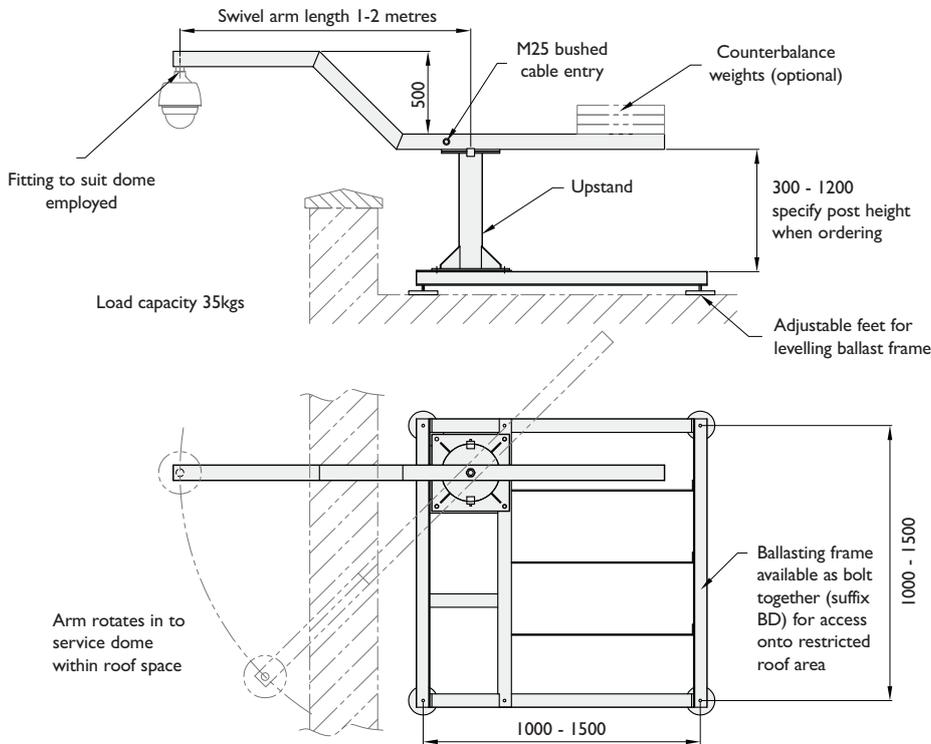
- o Available as flat mount as shown or corner mount

All brackets for camera mounting have a $\varnothing 127$ mounting plate with 8 no $\varnothing 8.5$ equi - spaced on 101.6 PCD

SBI-RM/D

Dome swivel arm roof mounted bracket

Dome Mount Swivel Arm Brackets



Arm Length	Pt No.
1m	● SBI-1000RMD
1.2m	● SBI-1200RMD
1.5m	● SBI-1500RMD
2m	● SBI-2000RMD

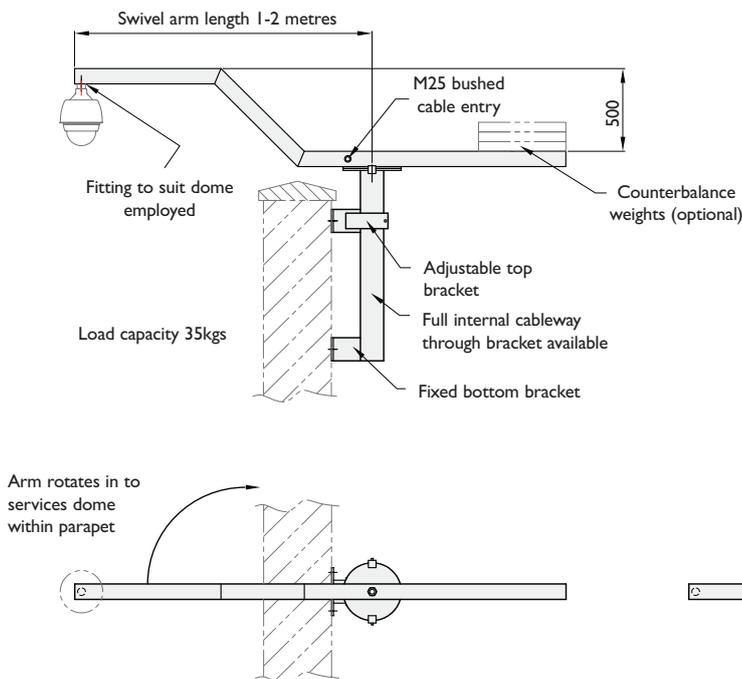
Upstand Heights Available

- 300 mm (supplied as standard)
 - 600mm
 - 1100mm
 - Other sizes made to order
- Typical ballast amount 200 - 250kgs depending on arm length post height and location
 - Fittings provided for all dome types - please specify when ordering
 - Also available with bolt together frame (suffix BD) for access onto restricted roof areas

● Stock items

SBI-PM/D

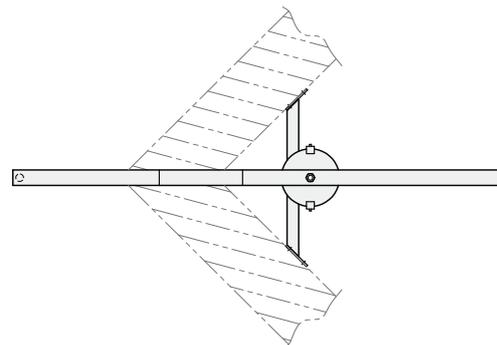
Dome swivel arm parapet mounting bracket



Arm Length	Pt No.
Flat Parapet Mount	
1m	● SBI-1000PMD
1.2m	● SBI-1200PMD
1.5m	● SBI-1500PMD
2m	● SBI-2000PMD
Corner Parapet Mount	
1m	● SBI-1000PMC/D
1.2m	● SBI-1200PMC/D
1.5m	● SBI-1500PMC/D
2m	● SBI-2000PMC/D

SBI-PMC/D Corner mount option

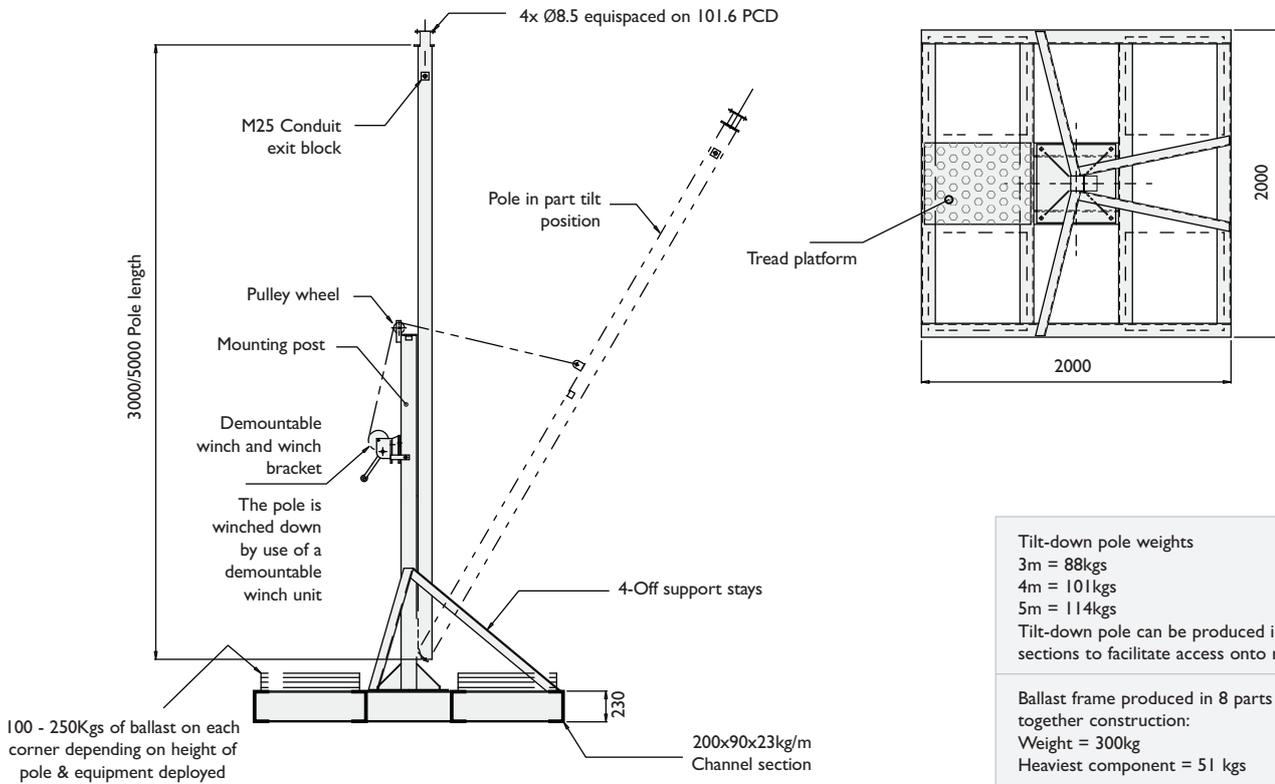
- Fittings provided for all dome types - please specify when ordering



→ Roof Mounted Brackets

AW3287

Ballasted frame - roof mounted 3/5m tilt-down-column bottom hinged

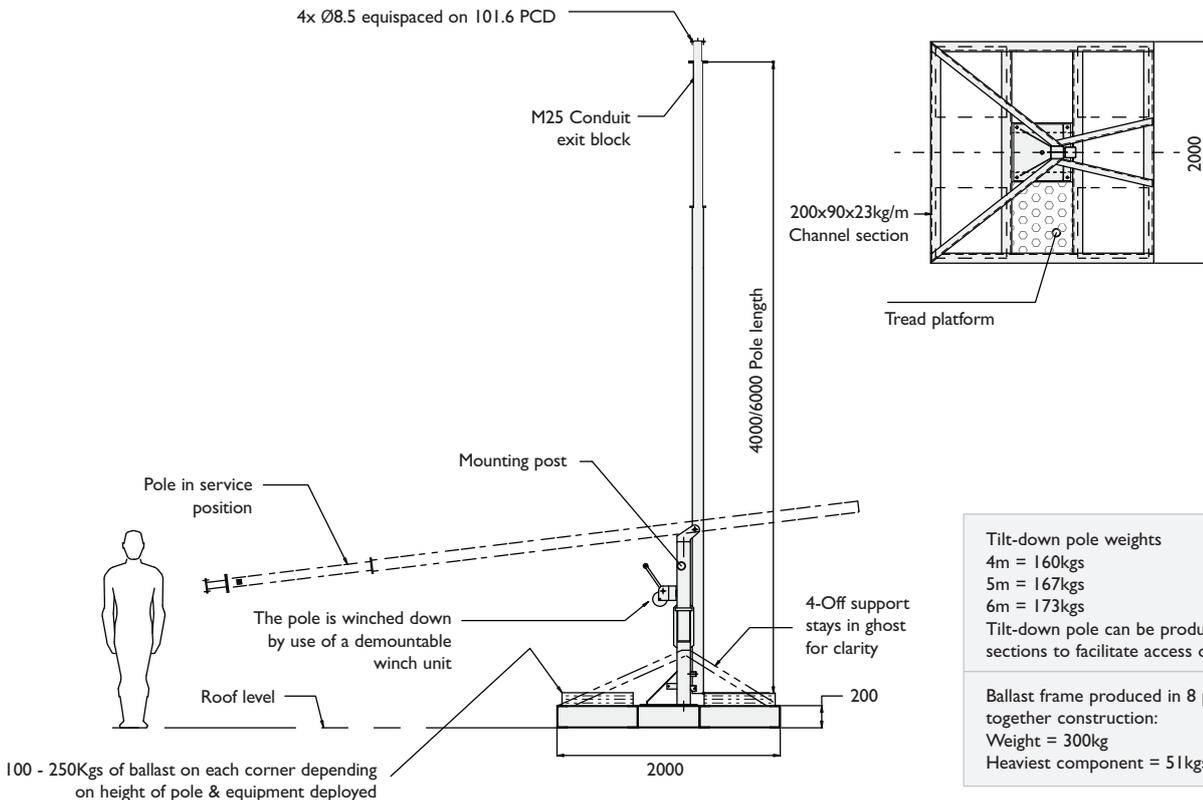


Tilt-down pole weights
 3m = 88kgs
 4m = 101kgs
 5m = 114kgs
 Tilt-down pole can be produced in 2 metre sections to facilitate access onto roof

Ballast frame produced in 8 parts of bolt together construction:
 Weight = 300kg
 Heaviest component = 51 kgs

AW3288

Ballasted frame - roof mounted 4/6m tilt-down-column mid hinged



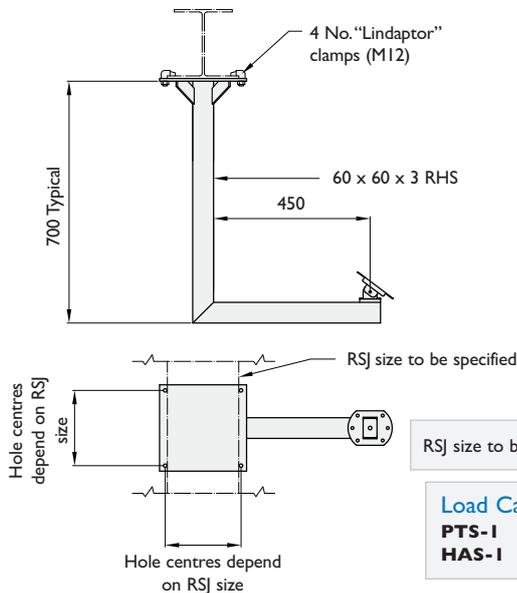
Tilt-down pole weights
 4m = 160kgs
 5m = 167kgs
 6m = 173kgs
 Tilt-down pole can be produced in 2 metre sections to facilitate access onto roof

Ballast frame produced in 8 parts of bolt together construction:
 Weight = 300kg
 Heaviest component = 51kgs

RSJ Mounting Bracketry

AW2133/SF

Underslung 'J' bracket for fixed camera



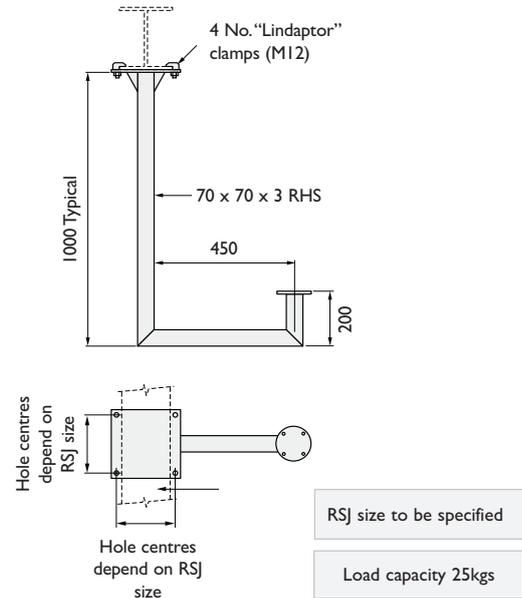
RSJ size to be specified

Load Capacities

PTS-I 10kgs
HAS-I 20kgs

AW2133/SPT

RSJ - underslung 'J' bracket for PTZ

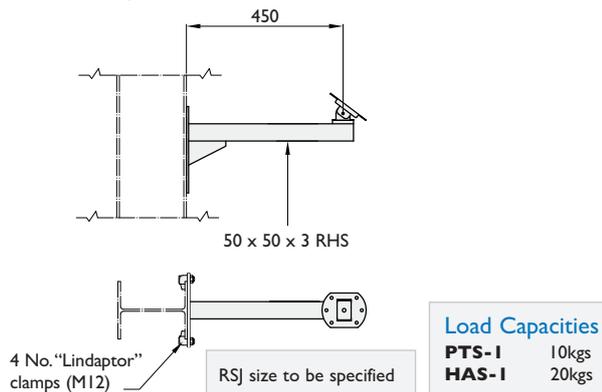


RSJ size to be specified

Load capacity 25kgs

AW1606/SF

Girder mounting bracket for fixed camera

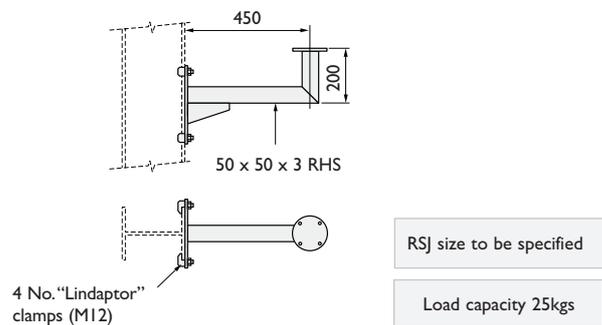


Load Capacities

PTS-I 10kgs
HAS-I 20kgs

AW1606/SPT

Girder mounting bracket for PTZ camera

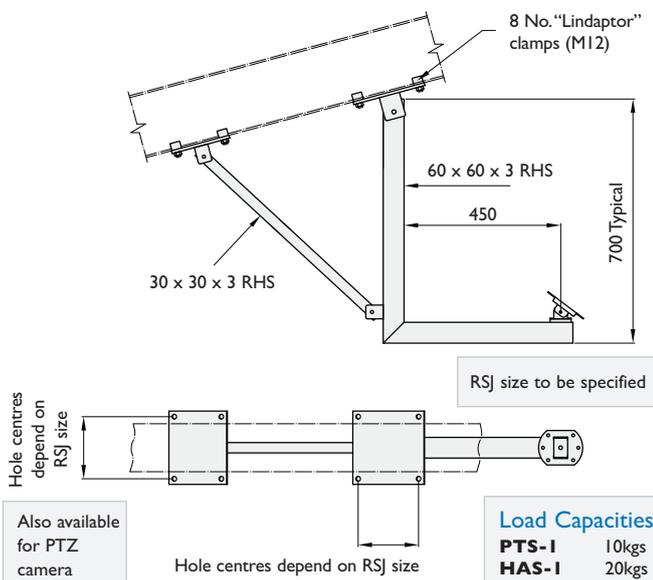


RSJ size to be specified

Load capacity 25kgs

AW2134/SF

Underslung 'J' bracket for angled RSJ



RSJ size to be specified

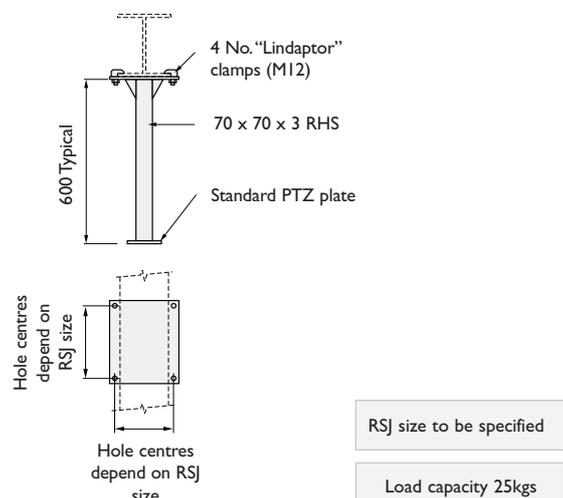
Load Capacities

PTS-I 10kgs
HAS-I 20kgs

Also available for PTZ camera

AW2007

Girder suspended bracket



RSJ size to be specified

Load capacity 25kgs

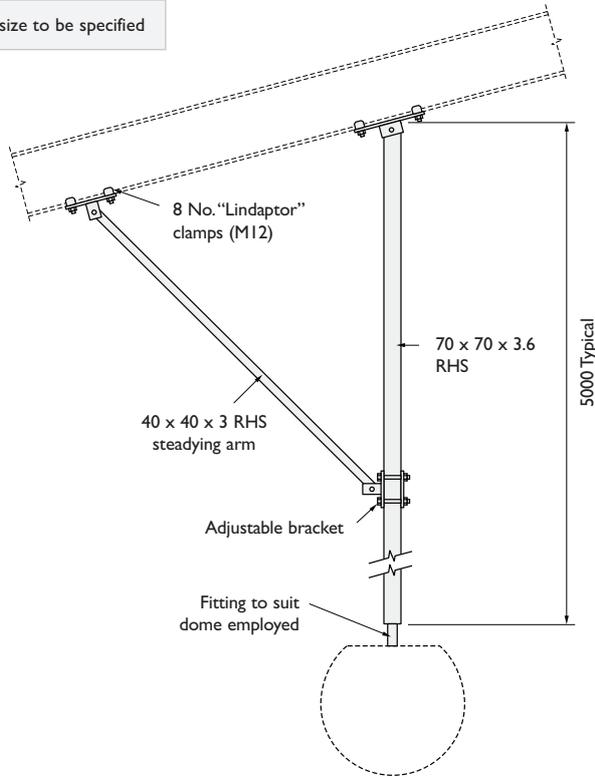
All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

RSJ Mounting Underslung Bracketry

AW2032

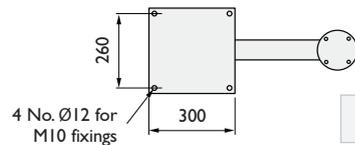
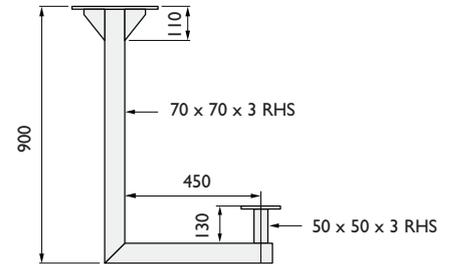
Suspended arm for dome

RSJ size to be specified



AW2053

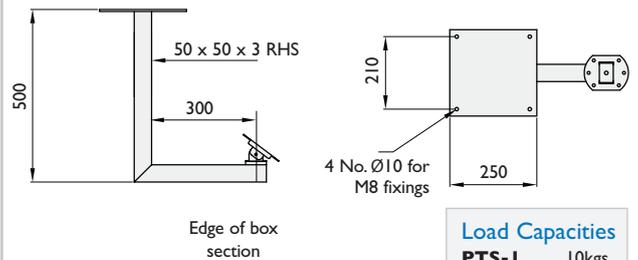
Soffit underslung 'J' bracket PTZ camera



Load capacity 25kgs

AW1933

Soffit underslung 'J' bracket fixed camera



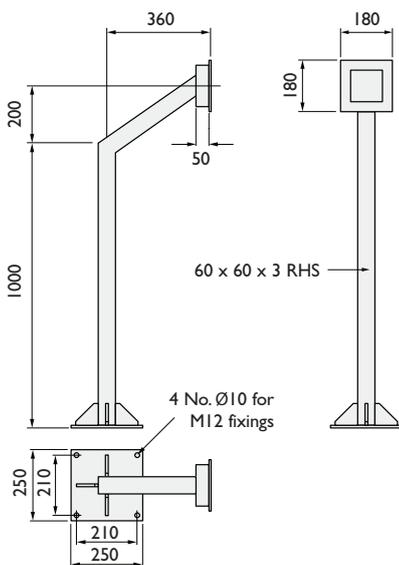
Edge of box section

Load Capacities
PTS-I 10kgs
HAS-I 20kgs

Pedestals

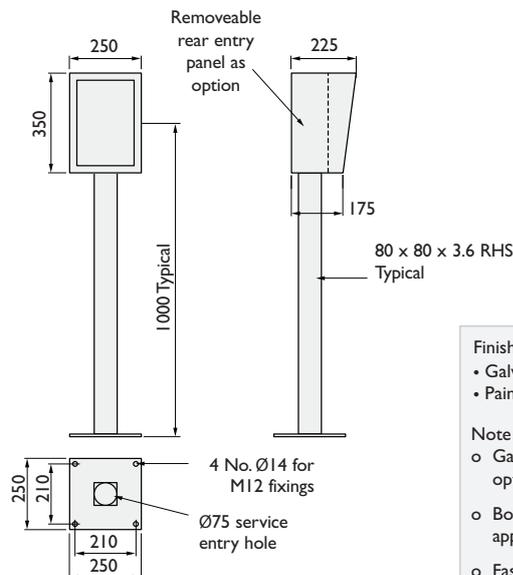
AW1915

Car park entry pedestal



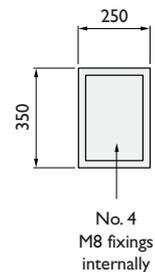
AW1995

Door entry pedestal



AW1995/WM

Wall mount door entry unit



Finishes available

- Galvanised
- Powdercoated
- Painted
- Stainless steel brushed

Note

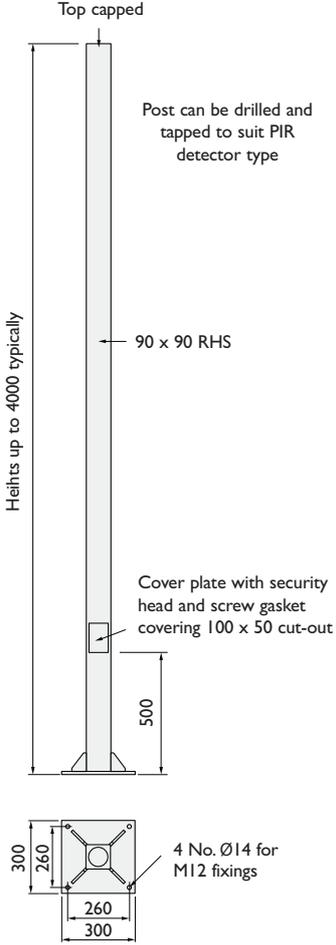
- o Galvanised is standard finish - other finishes are optional and at additional cost
- o Box sizes are typical and can vary to suit application
- o Fascia plates produced for either surface mount or flush mount equipment
- o Dimensions are typical and can be specified to suit site requirements

Pedestals are available for pedestrian and car entry as shown. Also taller versions for lorry's and dual versions for car and lorry entry

All brackets for camera mounting have a Ø127 mounting plate with 8 no Ø8.5 equi - spaced on 101.6 PCD

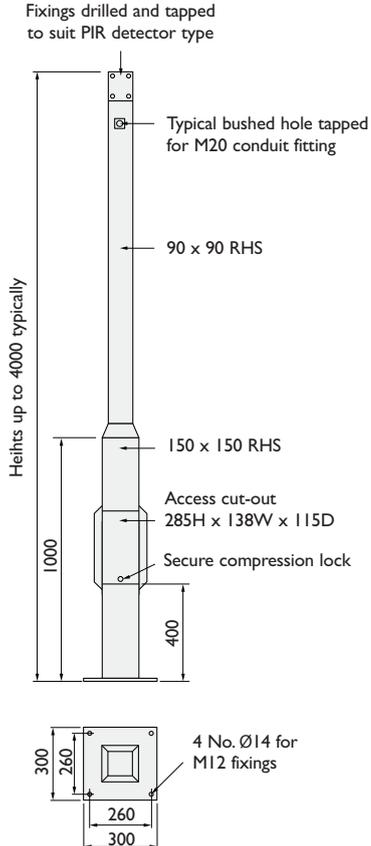
AW2380

PIR mounting post



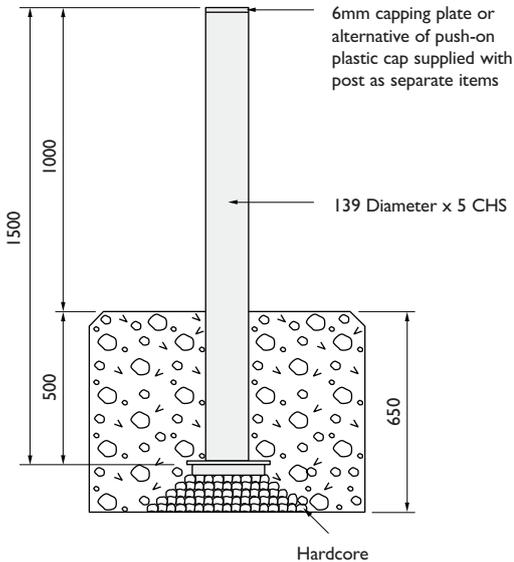
AW2136

Mounting post for PIR with compartment

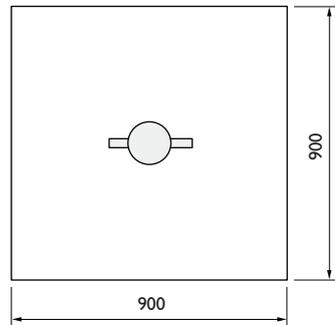


AW1771

Anti ram bollards



- o Standard finish is hot dip galvanised
- o Powder coated finish over galvanising to BS and RAL colour charts



Set bollard into foundation. Fill bollard with concrete - capping plate has rags on underside to push into the concrete filled bollard holding plate in position once concrete has set

→ Special Bracket Design

As well as providing a wide range of standard brackets we have over the past 20 years built up a significant library of 'special' designs, to overcome the many varying and challenging requirements for mounting cameras in difficult and unusual locations.

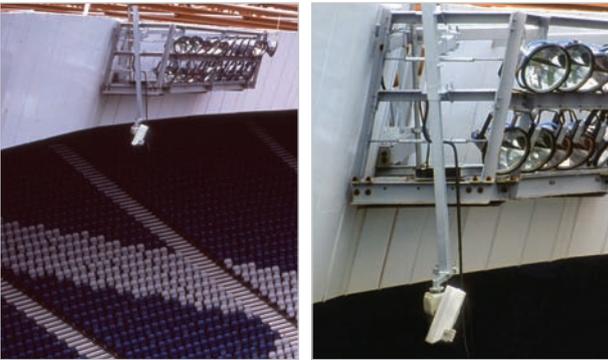
Today we find that the many 'specials' are a variation of either a standard bracket or a modification to a previous design for a similar application, so they are straight forward for us to produce.

We also have many standard design features that can be brought together into a one bespoke off design. And where the requirement is completely specific, we offer a full design service.

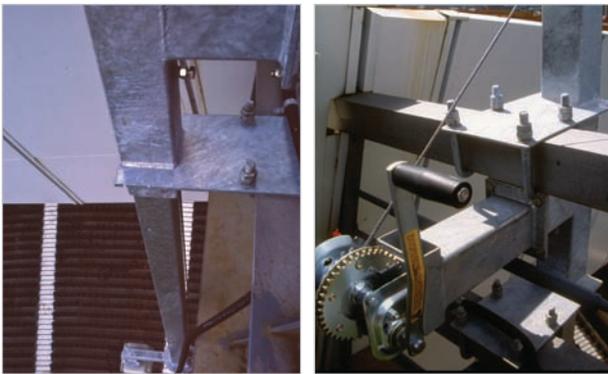
The diagrams in this section illustrate how we have overcome various specific customers installation requirements. The photographs are just a small sample of the many thousands of specials we have produced.

Hampden Park lighting gantry bracket

Telescopic raise and lower bracket to enable camera servicing within lighting gantry.



In operational position



Top view

Winch mechanism

Waterloo bridge bracket

Retractable bracket using separate device to raise for servicing of camera



Case Study

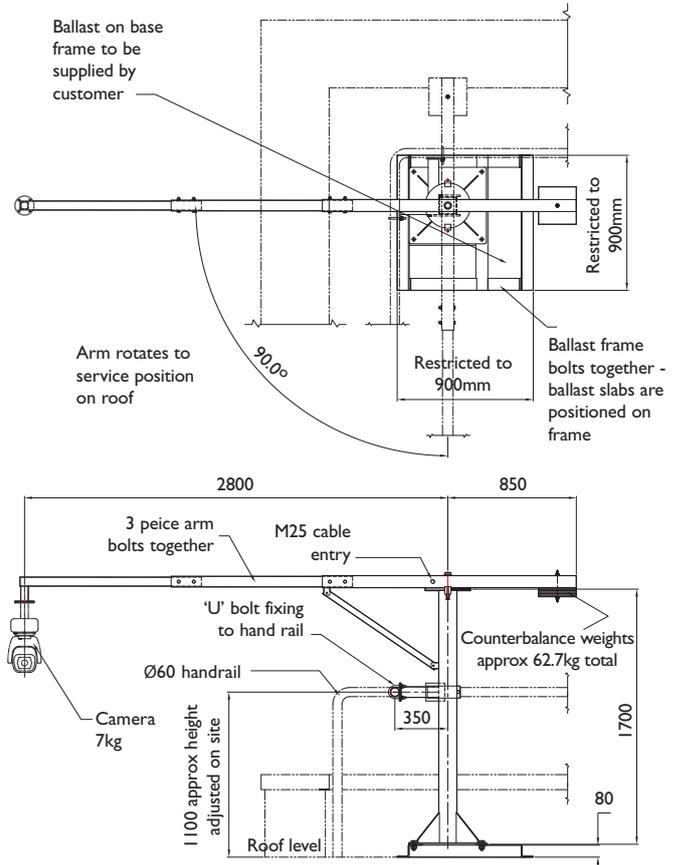
Ballast Swivel arm bracket

Scenario

The customer requirement was to have the dome extend out over the building edge by 1500mm. The bracket needed to be steadied by a handrail, but could not be structurally fixed to it, but also had a limited foot print for a ballast frame as this needed to fit inside a window cleaning gantry track. Arm could not protrude to the rear by more than 1m for the same reason. As the bracket is on a high rise roof, all parts needed to be small enough to carry onto the roof by one person via a lift and access stairs.

Solution

The solution was a swivel arm bracket with an arm that breaks down into three parts and is bolted together, along with a bolt together frame, bolt on steadying arms and counterbalance weights for the rear of the arm.



Case Study

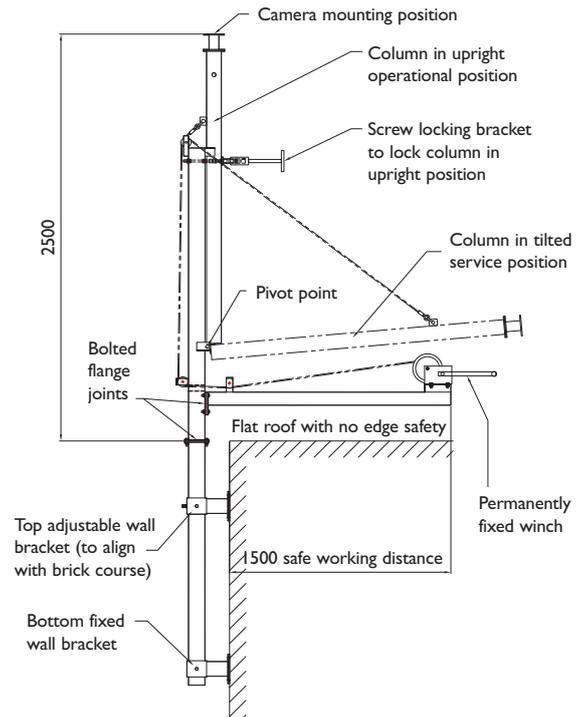
Roof edge mounted tilt down column

Scenario

The customer needed to mount a camera approx 2.5 metres high at an unprotected roof edge and be able to winch the camera in for servicing at a safe distance from the roof edge (1.5m).

Solution

The solution was a tilt down column, mounted to a wall mounted post and tilted down using a fixed winch on an extended arm. The column is locked in the vertical with a screw lock that can be operated at arm's length. The winch cable is routed around the bracket to enable the column to tilt down away from the edge of the roof towards the operator.



Stainless Steel Corner Bracket

Made to customer specification



Ornate Corner Mount Bracket

To match existing street furniture



Case Study

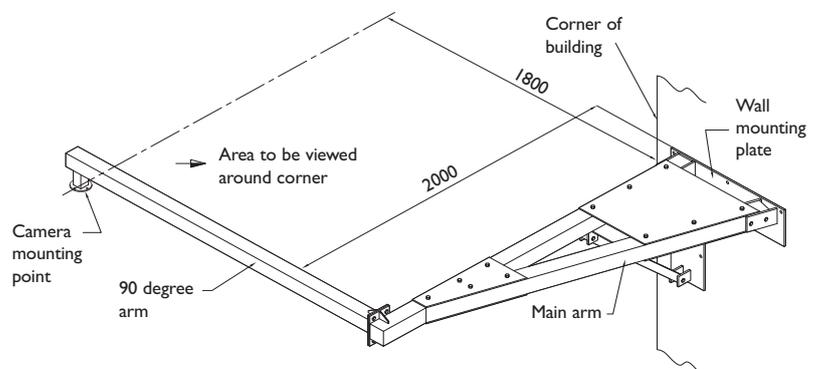
90 degree extended arm wall bracket

Scenario

Customer requirement was to view a fire escape door area being used as a shelter for drug abuse. The camera needed to be in a position where it could look at the door way, but be out of reach with the bracket fixing point, camera cables etc, not accessible from the fire escape.

Solution

The solution was for the bracket mounting points to be round the corner of the building, completely inaccessible and for the bracket to be installed using a cherry picker. The bracket has an arm at 90 degrees to reach around the corner and look at the fire escape and to stand off far enough to not be reached from the fire escape. The bracket needed to be made in three pieces - wall mounting plate, main arm and additional arm forming the 90 degree portion. The main arm needed to be sufficiently rigid to keep the movement of the 90 degree arm to a minimum.



→ Special Bracket Design

Case Study

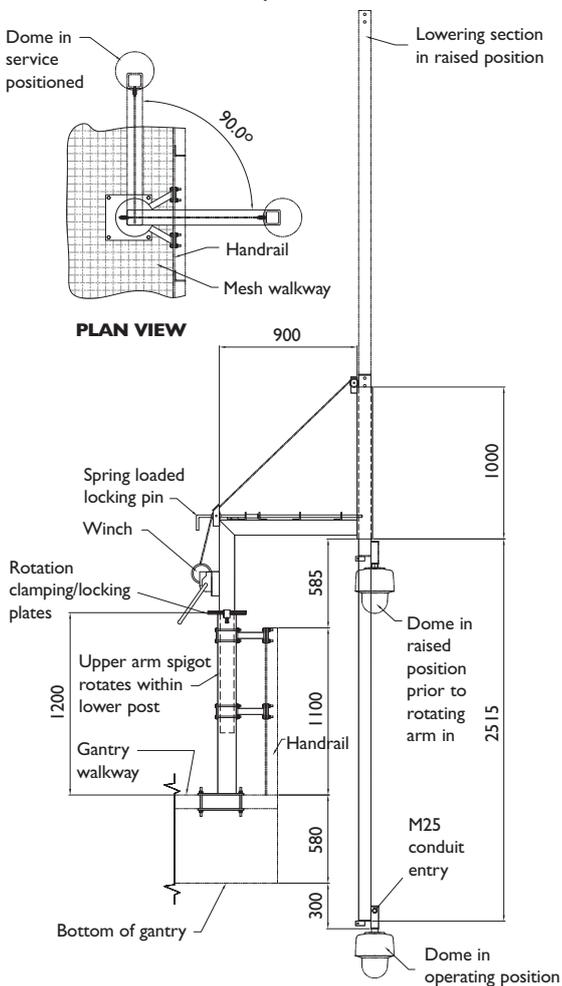
Gantry mounted telescopic, retractable, swivelling, dome mounting bracket

Scenario

Customer requirement was to have a dome mounted below a railway gantry to view along marshalling tracks and then to be able to bring the dome up onto the gantry walkway for servicing. The operation needed to take place within the gantry handrail with no overreaching.

Solution

The solution was a pole section that is lowered using a winch through an extended arm which swivels to enable the dome to be brought into the gantry walkway. The swivel arm is locked in the outward 'operating' position and can be padlocked there. The lowering pole is not held on the winch rope when lowered, but by a locking pin, that is spring loaded and operated from within the gantry. The bracket is fixed to the gantry floor and handrails for stability.



Parapet Mounted Counter-Balance Bracket

Mounts to top of parapet only and tilts by hand onto roof



Wall Mounted Pole

No stand-off to customer specification



Cantilever Arm Tower

Cameras oriented downwards to observe vehicles



Ornate Pole Top Bracket

To customer specification in keeping with other street furniture





Our standard range of cabinets are of robust and secure design. They are not intended to compete with light duty pressed steel cabinets. Material used in the body is steel plate, which is between 4-6mm thick depending on cabinet size. All cabinets are fully fabricated and then hot dip galvanised after fabrication. The finish is powder coated, and the minimum expected life span is 25 years.

As well as being very resistant to physical attack, they have key security features, to resist vandal attacks and attempts to force entry.

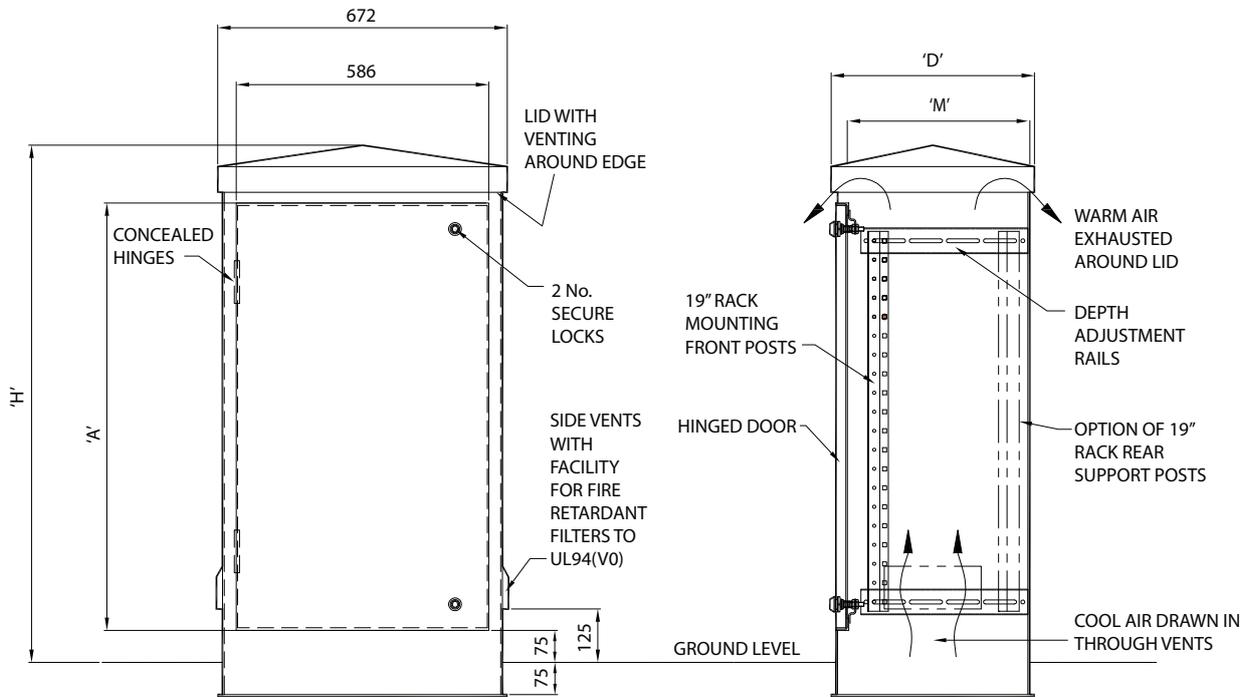
A full range of accessories and options are available.

→ AEC Equipment Cabinet Range



AEC Cabinet Range Features

- For use with 19" rack mounted equipment
- Hinged door with internal hinges
- Heavy duty fabricated construction
- Hot dip galvanised finished gives minimum expected 25 year lifespan
- Numerous security features ensure high level of vandal resistance
- Earthing points within cabinet and on door
- Convection air circulation and venting as standard
- Additional back board can also be provided
- Swing frame option and rear access door options available
- As well as the standard range, special sizes and customer defined specifications can be produced to order
- Stainless steel version available
- Standard colours are 14C39 Holly bush green or Black. Other colours from BS/RAL colour charts available on request
- For security features see p99



Cabinets

Model No.	Height H	Depth D	Maximum Mounting Depth M	Door Aperture A x 516	Mounting Post Height	Cabinet Weight Kgs
AEC-90-65-45	900	450	400	650 x 516	15u	120
AEC-90-65-65	900	650	600	650 x 516	15u	132
AEC-111-65-45	1100	450	400	850 x 516	20u	140
AEC-111-65-65	1100	650	600	850 x 516	20u	154
AEC-133-65-45	1300	450	400	1050 x 516	25u	161
AEC-133-65-65	1300	650	600	1050 x 516	25u	177
AEC-166-65-45	1600	450	400	1250 x 516	30u	180
AEC-166-65-65	1600	650	600	1250 x 516	30u	200

All dimensions in mm

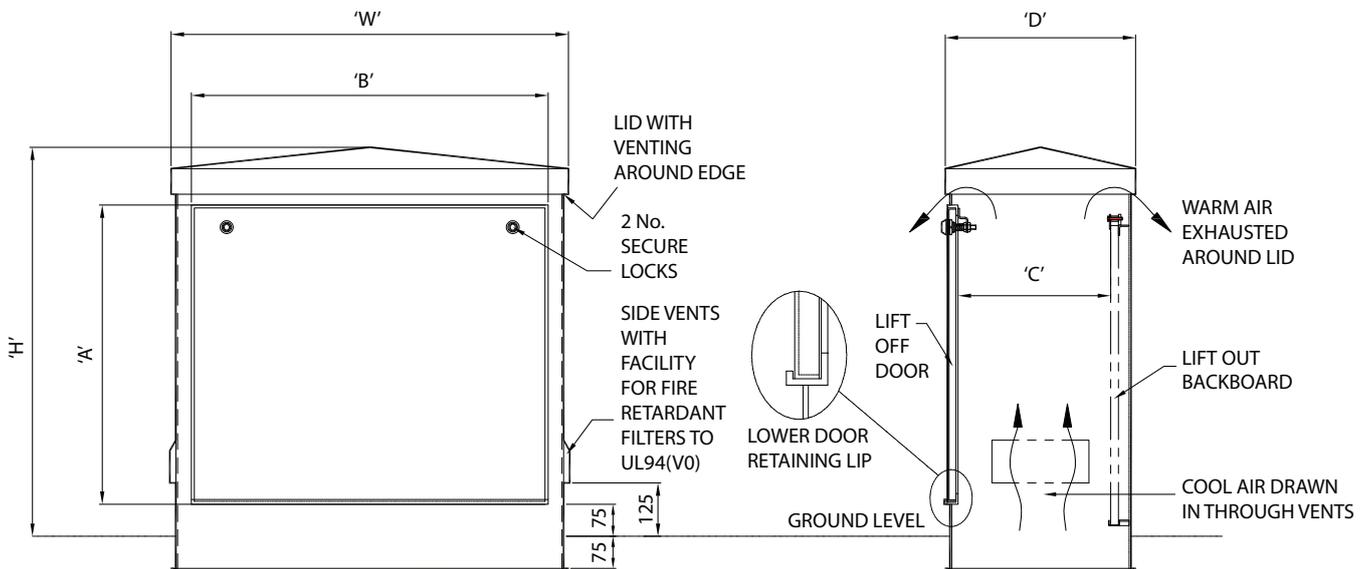
Options	PT No.
Tamper Switch	/TS
4 point locking	/A4P
High Security lock in addition	/HS
Filter for vents	/F
Circulation Fan with filter for vents	/CF
Thermostat	/T
Heater	/H
Swing frame (cabinet width increases)	/SF
Padlockable Hasp and Staple	/PHS
Backboard - Removable	/BB

ARC Roadside Cabinet Range ←



ARC Cabinet Range Features

- o Complete with quick release removable 15 mm thick treated backboard for equipment mounting
- o Lift off door
- o Heavy duty fabricated construction
- o Hot dip galvanised finished gives minimum expected 25 year lifespan
- o Numerous security features ensure high level of vandal resistance
- o Earthing points within cabinet and on door
- o Convection air circulation and venting as standard
- o As well as the standard range, special sizes and customer defined specifications can be produced to order
- o Stainless steel version available
- o Standard colours are 14C39 Holly bush green or Black. Other colours from BS/RAL colour charts available on request
- o For security features see p99



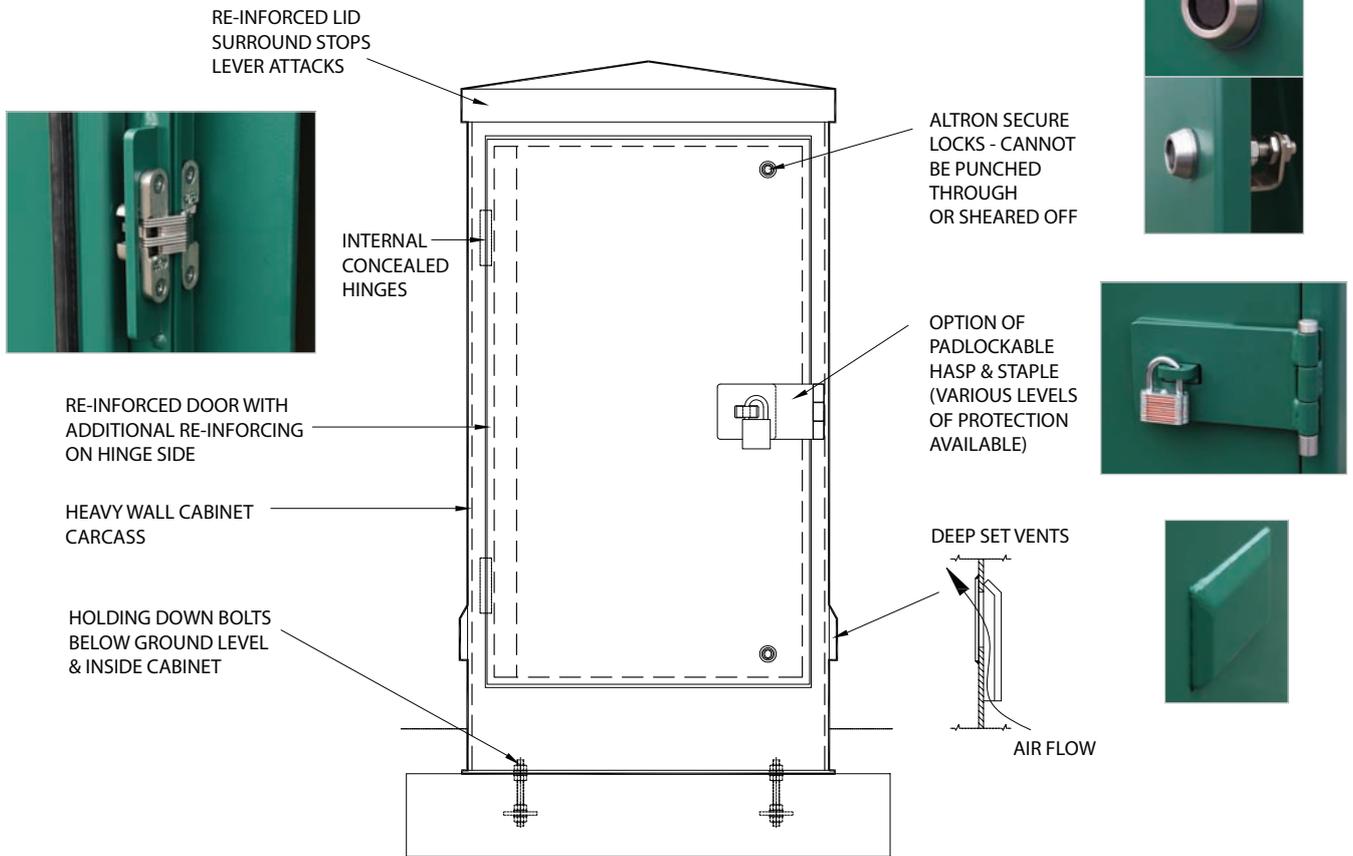
Model No.	Height H	Width W	Depth D	Working Depth C	Back Board Height x Width	Door Aperture A x B	Cabinet Weight Kgs
ARC-90-60-32	900	600	320	220	700 x 470	650 x 475	90
ARC-90-90-32	900	900	320	220	700 x 770	650 x 775	122
ARC-90-12-32	900	1200	320	220	700 x 1070	650 x 1075	154
ARC-12-60-32	1200	600	320	220	1000 x 470	950 x 475	113
ARC-12-90-32	1200	900	320	220	1000 x 770	950 x 775	145
ARC-12-12-32	1200	1200	320	220	1000 x 1070	950 x 1075	177
ARC-90-60-42	900	600	420	320	700 x 470	650 x 475	97
ARC-90-90-42	900	900	420	320	700 x 770	650 x 775	132
ARC-90-12-42	900	1200	420	320	700 x 1070	650 x 1075	167
ARC-12-60-42	1200	600	420	320	1000 x 470	950 x 475	121
ARC-12-90-42	1200	900	420	320	1000 x 770	950 x 775	153
ARC-12-12-42	1200	1200	420	320	1000 x 1070	950 x 1075	185

All dimensions in mm

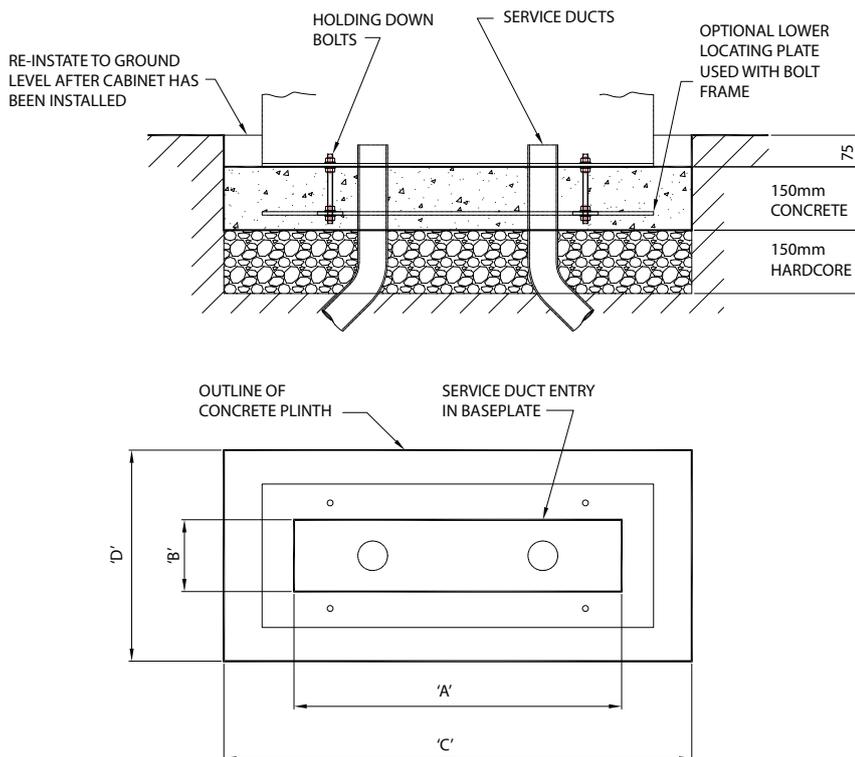
Options	PT No.
Tamper Switch	/TS
4 point locking	/A4P
High Security lock in addition	/HS
Filter for vents	/F
Circulation Fan with filter for vents	/CF
Thermostat	/T
Heater	/H
Padlockable Hasp and Staple on either side of door	/PHS

→ Cabinet Features

Security Features



Installation Details



Base Entry Details

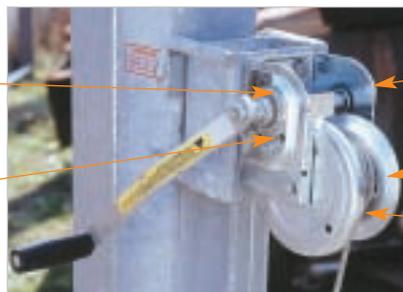
Part number	Base plate aperture for duct entry A x B	Concrete plinth footprint C x D
ARC- * - 60 - 32	470 x 170	800 x 500
ARC- * - 90 - 32	770 x 170	1100 x 500
ARC- * - 12 - 32	1070 x 170	1400 x 500
ARC- * - 60 - 42	470 x 270	800 x 600
ARC- * - 90 - 42	770 x 270	1100 x 600
ARC- * - 12 - 42	1070 x 270	1400 x 600
AEC- * - 65 - 45	520 x 270	880 x 650
AEC- * - 65 - 65	520 x 370	880 x 850

* All height variations

- o Cabinet supplied complete with template and holding down bolts
- o Bolt frame is available as an extra item

BRAKING MECHANISM
WITHIN WINCH CASING

DOUBLE RACHET



ROBUST WINCH HOUSING WITH
HEAVY ZINC PLATED FINISH

LARGE CABLE DRUM

CABLE DRUM GEAR GUARD

Winches

Altron auto-braking winch kits have been proven in the field for over 25 years and have the following safety features

1. **Auto-braking mechanism** comprises a friction clutch. When the winch cable is wound in (raising the tower, column or pole), a conventional ratchet is used. When the cable is wound out (lowering the tower, column or pole), a friction clutch is engaged. The greater the load, the greater the clutches holding capacity. If the handle is released, the load is held on the clutch and is fail safe.
2. **Winch-drum guard.** On DW1000 and DW1500 winches a guard is fitted as standard. This reduces the possibility of anything getting trapped in the gears of the winch during operation such as loose clothing, etc. and also reduces the possibility of the drum gears getting damaged.
3. **Large diameter drum core.** Reduces flattening and kinking of winch cable, extending the usable life of the cable.
4. **Gearing ratio.** The gearing ratio used on all winches stops the winch being overloaded by manual winding of the winch handle. A specific design feature, when the winch is used correctly, the pressure on the winch handle required to overload the winch is greater than can be applied by hand. Therefore under normal conditions when the winch is used in accordance with our operating instructions and with camera equipment within maximum rated, winches cannot be overloaded.

Notes on Altron Winch Kits

Altron winch kits are designed to be as simple and safe as possible to use, but as with all mechanical equipment, require correct operation and regular maintenance to ensure safe and reliable on-going use.

Prior to raising or lowering any Altron tilt-down products, the operator should have thoroughly read the operating instructions supplied and should be familiar with the winch operating procedures and the possible risks involved.

Instructions are always available by contacting Altron and regular training courses are run at our offices.

Under LOLER (The Lifting Operations and Lifting Equipment Regulations 1998), it is the winch owner's responsibility to arrange an annual inspection of the winch to ensure that it is kept in a serviceable condition. Details of these requirements can be obtained from Altron.

Winch Mounting Options

Altron winches are mounted in the optimum position on all products, so that only balanced loads are applied to the product and winch mechanism. This gives an increased life span for the winch and pulleys and reduces maintenance due to wear.

To achieve this, winch bracket and handle combinations vary between product types. Each winch unit has a part number and serial number and it is imperative that the correct winch unit is used on each product. Winch part numbers are noted against all products in this catalogue.

The photographs below show the three sizes of winch that we supply and also the three bracket mounting types.



DW1000 Winch mounted on ACC2BPLA column. This bracket type for ACC/ACT columns and towers.



DW1500 Winch mounted on AW1545/TD pole. This bracket type for tubular poles.



DW2500 Winch mounted on ANCT tower. This bracket type for ANCT towers only.

Foundations & Wind loading

Further information on foundations and wind loading for Altron products can be found on the following pages. This contains useful information which may help when assessing and planning projects using Altron CCTV products.

Foundation sizes for elevated sites and Area D

The table below shows foundation sizes for area D installations and, for exposed, elevated locations, higher than 100-150m above sea level. For areas A,B and C the left hand column shows the foundation size shown in the product foundation page - read across the table for the relevant foundation size to be used for the relevant location.

e.g. in the foundations table on p21 an ACC2/BPLA for country location in area B has a foundations size of 1.2 x 1.2 x 0.6 but the location is at 300m ASL. Look for the foundation size in the left hand column of the table below and read across the row to the 'Elevated foundation' column for the correct foundation size, for the elevated location.

- For locations above 350m above sea level (ASL) and area D locations above 250m ASL, please contact Altron who will advise on product suitability and foundation sizes.
- Products marked with an asterisk in their foundation page are note suitable for installations in Area D or in area C above 200m. Please select an alternative product.

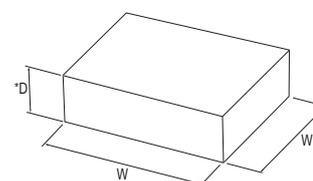
Foundation size Shown in product Foundations table Area A&B 0-100m Area C 0-150m	Area D foundation size to be used (0-250m ASL) instead of area C foundation	Area A&B foundation sizes for elevated sites 100-200m ASL	Area A&B foundation sizes for elevated sites 200-350m ASL	Area C foundation sizes for elevated sites 150-350m ASL
0.8 x 0.8 x 0.4	0.9 x 0.9 x 0.5	0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	0.9 x 0.9 x 0.5
0.9 x 0.9 x 0.5	1.0 x 1.0 x 0.5	1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.0 x 1.0 x 0.5
1.0 x 1.0 x 0.5	1.1 x 1.1 x 0.55	1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.1 x 1.1 x 0.55
1.1 x 1.1 x 0.55	1.2 x 1.2 x 0.6	1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.2 x 1.2 x 0.6
1.2 x 1.2 x 0.6	1.3 x 1.3 x 0.65	1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.3 x 1.3 x 0.65
1.3 x 1.3 x 0.65	1.4 x 1.4 x 0.7	1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.4 x 1.4 x 0.7
1.4 x 1.4 x 0.7	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.5 x 1.5 x 0.75
1.4 x 1.4 x 0.75	1.5 x 1.5 x 0.75	1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.5 x 1.5 x 0.75
1.5 x 1.5 x 0.75	1.6 x 1.6 x 0.8	1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.6 x 1.6 x 0.8
1.6 x 1.6 x 0.8	1.7 x 1.7 x 0.9	1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.7 x 1.7 x 0.9
1.7 x 1.7 x 0.9	1.8 x 1.8 x 0.9	1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.8 x 1.8 x 0.9
1.8 x 1.8 x 0.9	1.9 x 1.9 x 1.0	1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	1.9 x 1.9 x 1.0
1.9 x 1.9 x 1.0	2.0 x 2.0 x 1.0	2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.0 x 2.0 x 1.0
2.0 x 2.0 x 1.0	2.1 x 2.1 x 1.1	2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.1 x 2.1 x 1.1
2.1 x 2.1 x 1.1	2.2 x 2.2 x 1.1	2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.2 x 2.2 x 1.1
2.2 x 2.2 x 1.1	2.3 x 2.3 x 1.2	2.3 x 2.3 x 1.2	2.4 x 2.4 x 1.2	2.3 x 2.3 x 1.2
2.3 x 2.3 x 1.2	2.4 x 2.4 x 1.2	2.4 x 2.4 x 1.2	2.5 x 2.5 x 1.2	2.4 x 2.4 x 1.2

ASL = Above Sea Level

Notes on foundations

- Grade C35 concrete to be used
- Allow a minimum of 72 hours for concrete to cure before placing pole/column/tower.
- A minimum ground bearing capacity of 75 kN/m² is assumed
- Foundations comply with BS8004 and with the 'Institutes of Lighting Engineers Technical Report Number 7' (ILE TR7).
- Foundation sizes are based on foundations being founded on natural ground. For made up ground, further assessment on ground suitability may be required.
- Foundation sizes shown are suitable for maximum equipment load and wind surface area as shown in product technical tables. For greater loads, foundations sizes will need to be increased, please contact us and we will advise on product suitability for greater loads and foundation requirements.
- Foundation sizes shown are not suitable for installations that include PV/ solar panels or small wind turbines. For this type of installation please contact our Sales office.

Foundation sizes in table are W x W x D



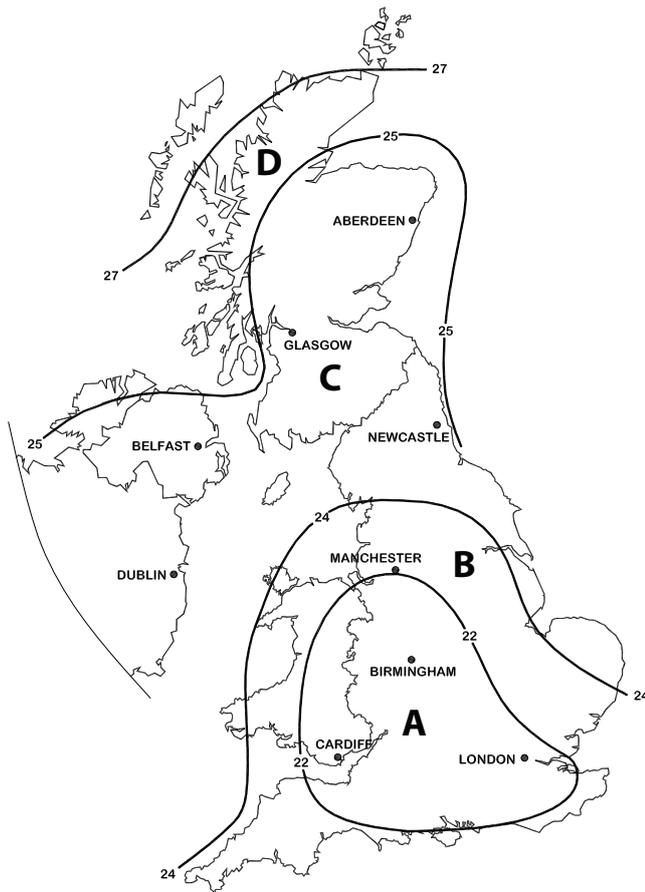
*D= 1000 on PM and buried flange/embedded base models

Factors that effect foundation sizes & installations wind surface area

The main factor that determines foundation size (other than the location of the installation), is the wind surface area of the equipment being mounted on the pole/ tower/ column. It is the wind surface area that produces the wind force (kgf) that transfers itself to the foundation, for which the foundation needs to be of sufficient size to overcome the 'over turning moment' produced by this lever force. The greater the surface area of equipment at the top of the structure, the larger the foundation size required, so it is very important that the 'Max equip surface area' shown in our technical tables is not exceeded. An extreme example of this is a solar panel which can be very light - only a few kilograms, but can have a large surface area and therefore require a much larger foundation size than the ones we state.

UK wind speed map

The UK map shows Basic Mean Hourly windspeeds with the contour lines defining areas A,B,C and D. Windspeeds are shown at sea level and for every 100m increase in altitude, the Basic Mean Hourly windspeed increases by 10%, then giving the Site Mean Windspeed.



This Map is represented in BS EN 8100, design standard for lattice towers and is also used for wind loading requirements for ILE TR7 (which refers to BS 6399 and this map in Fig. 6). Therefore the wind loading data used in the design of our foundations fully complies with the design standards we use for our CCTV lattice towers (BS EN 8100) and our tubular poles and columns (ILE TR7).

Definition of 'Town location' - Town locations are locations within built up areas, with at least 15% of the surface built on, and/or on which the average height of buildings exceed 15m - for locations on outskirts that do not comply with this, 'Country location' for foundation sizes should be used.

Definition of 'Country location' - All areas, both coastal, up to 100m ASL and inland up to 200m ASL, that are not 'Town locations' (see table for higher altitudes).

STANDARD					AREA A & B FOUNDATIONS UPTO 200m ASL			AREA AB & C FOUNDATIONS UPTO 350m ASL		
Area	Max Basic Mean Hourly Windspeed	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity	Height above sea level for foundation design	Site mean wind speed	Actual wind velocity
A	22 m/s	100m	24.2 m/s	41.8 m/s (93 mph)	200m	26.4 m/s	45.6 m/s (102 mph)	350m	29.7 m/s	51.4 m/s (115 mph)
B	24 m/s	100m	26.4 m/s	45.6 m/s (102 mph)	200m	28.8 m/s	50 m/s (111 mph)	350m	32.4 m/s	56 m/s (125 mph)
C	25 m/s	150m	28.8 m/s	50 m/s (111 mph)	N/A	N/A	N/A	350m	33.75 m/s	58.3 m/s (130 mph)
D	27 m/s	250m	33.75 m/s	58.3 m/s (130 mph)	N/A	N/A	N/A	N/A	N/A	N/A

International windspeed conversions

Our standard designs are based on a mean hourly wind speed of 28.8 m/s (metres per second). This table shows the conversion from this mean hourly wind speed, to other internationally recognised wind speed measurements. Conversions are taken from the International Code Council 'International Building Code'.

Mean Hourly	3 Sec Gust	10 Min Average	Fastest Mile
28.8 m/s	43.6 m/s	30.1 m/s	34.9 m/s
64.4 mph	97.5 mph	67.3 mph	78 mph
104.4 kph	158 kph	109 kph	126 kph

The actual wind velocity for a 28.8 m/s mean hourly wind speed = 50 m/s, 111 mph, 180 kph.

Specific site location foundation sizes

We can specify a more accurate foundation size for specific site locations. Foundations sizes shown in product tables are for the max allowable head load and for the highest windspeed for the Area A,B,C or D (for instance, the centre of London has a mean wind speed of 22.05 m/s rather than the 24.2 m/s we use for area A in general). Given a specific site location and maximum equipment load that will be employed, we can provide an ideal foundation size that will be the minimum required for the site. This can save on civils costs and also help when there are site restrictions for foundation size.

Foundation design service

For all products, we can provide specific foundation designs, for site conditions that do not comply with our standard designs. We are happy to provide guidance and pricing on request.

Equipment weight

The actual weight of the camera equipment does not significantly affect the foundation size, so for fixed, non-tilting products weight is not an issue. The weight of equipment is only relevant for tilt-down products, where the camera equipment weight needs to be lowered using the winch and winch cable. Weight then is then very important on tilt-down products, so as not to overload the winch and cable mechanism, so for tilt-down products the stated 'max equip weight' should not be exceeded.

Off-set loads

Off-set loads on fixed poles/ towers/ columns, typically produced by using one of our PMB or POB mounting brackets, are not a significant, other than the fact that an off-set load increases the deflection of the structure and the movement of the camera monitor image. Off-set loads will also increase the stress on the structure, so even though most Altron poles, towers and columns have plenty of capacity for increased stress, some do not, so it is important to consult with us when anything more than a relatively small offset (600mm) is being used. Towers do not like to be twisted, so a pole is much better for an offset load than a tower, but a larger diameter pole will be needed to keep deflection to a minimum.

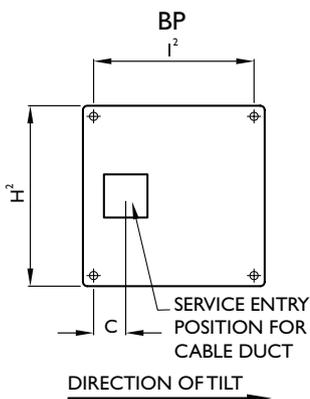
Offset loads on tilt-down products are not so desirable, unless in line with the direction of tilt, or if they are balanced (an equal load either side so when tilting the product, it is balanced). If the off-set load is not balanced, then this produces a side load at the hinge point, which can cause the hinge to bind, overloading the winch mechanism and is also a force that the hinge is not designed to take. We therefore recommend that a side load on a tilt-down product is only in line with the direction of tilt, or equal either side, so a balanced load.

Positioning Foundations

The following factors should be considered when assessing the location of a foundation in accordance with the type of product being used.

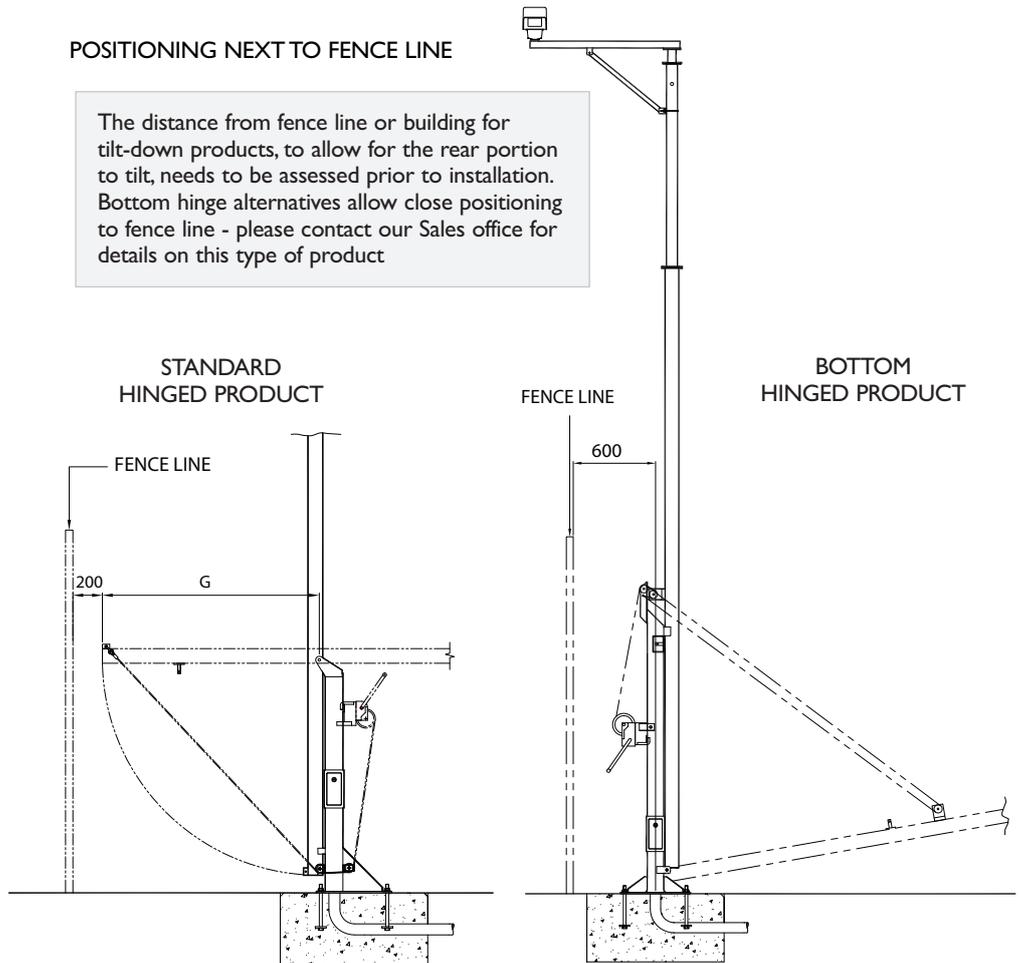
OFFSET OF CABLE DUCT ENTRY IN ACC/ACT BP MODELS

The off set positioning of cable duct entry for ACC/ACT products in conjunction with the direction of tilt needs to be assessed prior to installation, to ensure correct positioning of cable duct.

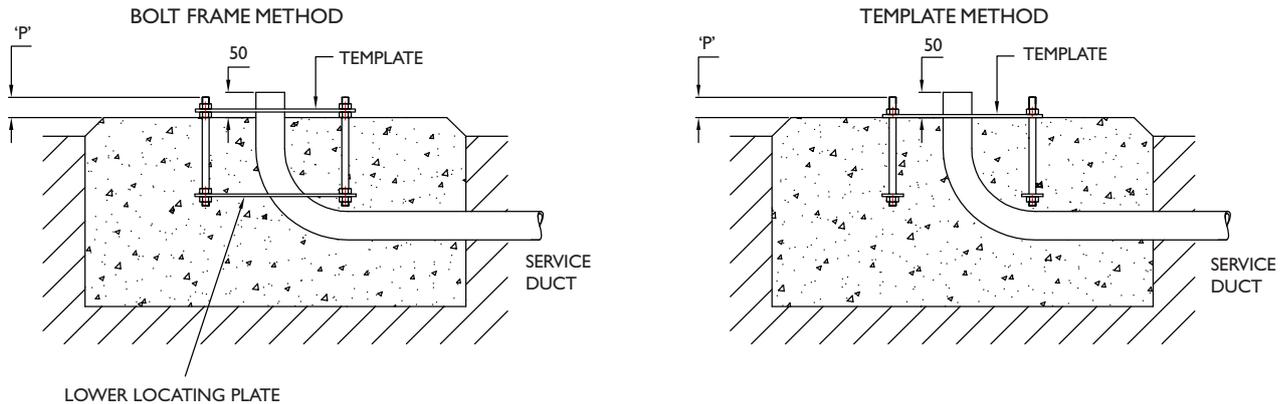


POSITIONING NEXT TO FENCE LINE

The distance from fence line or building for tilt-down products, to allow for the rear portion to tilt, needs to be assessed prior to installation. Bottom hinge alternatives allow close positioning to fence line - please contact our Sales office for details on this type of product



Flange Plate

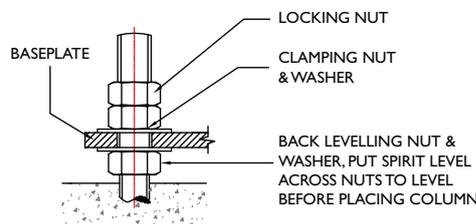


Flange Plate Installation Method

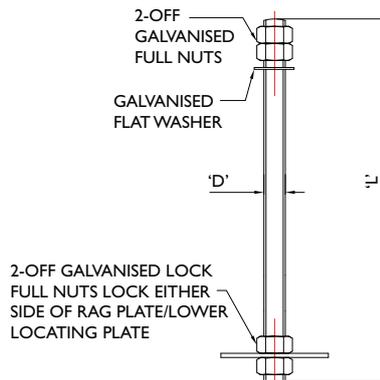
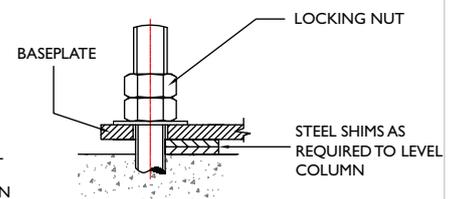
- Excavate as per recommended area and depth.
- Shutter off top edge level and place ducting - ensure that all shuttering is supported.
- Assemble bolts through template and screw nuts on so that recommended thread is protruding through template to give the relevant 'P' dimension when bolts are set in foundation, as noted in table.
- If using bolt frame, ensure that the nut below the top template will be clear of the finished concrete surface level when the 'P' dimension is achieved.
- For bolt frame method, position the assembled bolt frame in place within foundation pit, using cross slats to bridge pit and position service ducting so that a minimum of 50mm of duct will be proud of the finished concrete surface level.
- Pour concrete level with top of shuttering, tamp down and level surface.
- For bolt frame method, use a vibrating poker whilst pouring concrete to ensure no air traps around bolt frame.
- For template method, push bolts down into concrete so that template is flat on concrete and nuts are against template with bolts vertical. Ensure that cable duct end is through entry hole in template and protrudes by 50mm min.
- Allow 72 hours for concrete to cure before placing pole/column
- Remove template before placing pole.

Note: Where back nuts are used to level pole/column it is essential that a load bearing grout is used to fill the void between base plate and concrete. Failure to do this may cause excessive deflection in pole.

ANCHORAGE USING BACK NUT METHOD



ANCHORAGE USING TEMPLATE SETTING METHOD



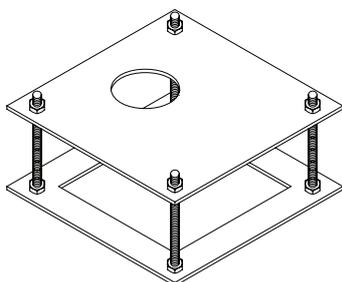
2-OFF GALVANISED LOCK FULL NUTS LOCK EITHER SIDE OF RAG PLATE/LOWER LOCATING PLATE



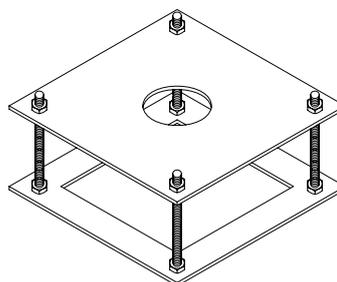
Bolt size	Bolt projection		Tightening	
	P in mm		Torque - NM	
M16	50		90	
M20	60		190	
M24	80		280	
M27	100		400	

Bolt Frames

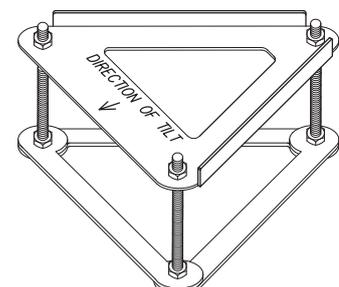
BP BOLT FRAME OPTION
For tilt-down columns & towers



FB BOLT FRAME OPTION
For fixed columns and tubular fixed & tilt-down poles



ANCT BOLT FRAME
standard on ANCT towers



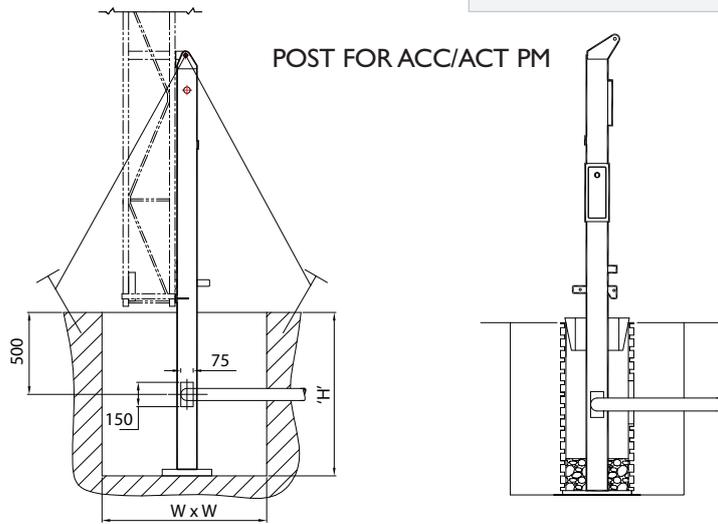
FOR ANCT INSTALLATION DETAILS REFER TO SHEET 4940-26

PM Method for columns and towers

1. Excavate as per recommended area and depth.
2. Shutter off top edge level and place ducting - ensure that all shuttering is supported.
3. Place 100mm of hardcore (paving slab) under post.
4. Guy from top of post with 3-4 stakes and guy ropes.
5. Plumb level post by adjusting guy ropes position ducting as required, ensuring it is supported sufficiently.
6. Pour concrete and check post for plumb.
7. Allow 72 hours for concrete to cure.
8. Remove guys and stakes.
9. Fix tower to post.

Post Mounted

Alternative method as used on embedded pole / column installation



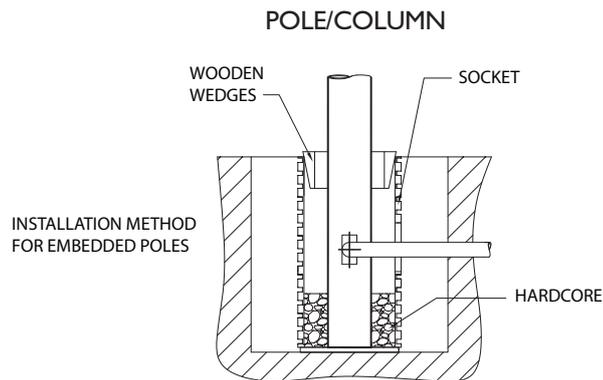
FOR FURTHER DETAILS REFER TO SHEET 4940-36

FOR FURTHER DETAILS REFER TO SHEET 4940-23

Embedded base installation method

1. Excavate as per recommended area and depth
2. Set socket into excavated pit on 2no 1 inch thick slabs or suitable hardcore
3. Ensure socket verticality and that it is supported centrally.
4. Position service duct so that 100mm enters the socket, ensuring correct orientation with service entry point on pole.
5. Pour concrete on the outside of the pipe and fill pit to just below the top level of the socket.
6. Allow to cure for minimum of 72 hours
7. Lower pole into socket and support in position for operations 8-11
8. Fill hardcore and sand around the base of the pole to a depth of approx 150mm
9. Pack this down so that it is well compressed
10. Select timber wedges and wedge pole in 3 places ensuring pole is vertical
11. For poles up to 7 metres in height pour concrete into open socket. For poles over 7 metres in height use a cementitious grout instead of concrete. Use a vibrating poker to ensure no voids or air traps.
12. Allow 72 hours to cure
13. Remove wedges and fill gaps with grout

Embedded Base

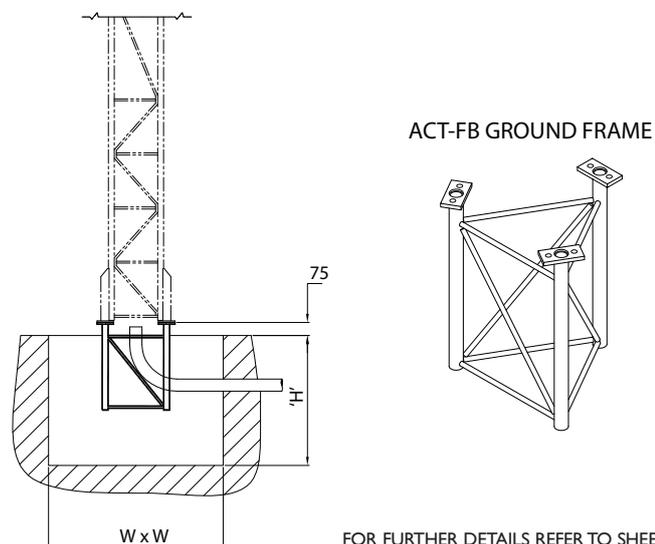


FOR FURTHER DETAILS REFER TO SHEETS
4940-24 FOR COLUMNS
4047-1 FOR POLES

FB Method for towers

1. Excavate as per recommended area and depth.
2. Shutter off top edge level and place ducting - ensure that all shuttering is supported.
3. Support tower ground frame in excavated base by tying wooden slat across top of frame and resting end of slat either side of base.
4. Support slats in raised position so that top of tower ground frame is 75mm proud of base surface.
5. Position ducting so that it enters the base next to the required tower leg.
6. Level frame across the 3 No. flange ends.
7. Pour concrete and then check frame is level.
8. Allow 72 hours for concrete to cure before placing tower.

ACT FB



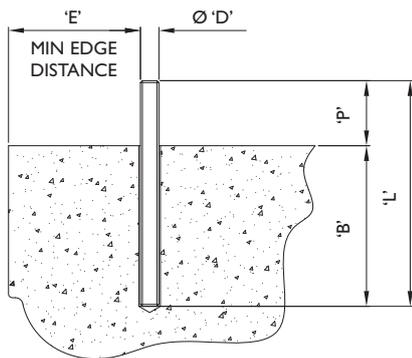
FOR FURTHER DETAILS REFER TO SHEET 4940-25

Alternative holding down methods

Installation of chemical anchors

For use on existing cast foundations or as an alternative to standard holding down bolts.

- We recommend the use of chemical anchors over expanding sheath type anchors.
- We can supply the chemical anchors shown below ex stock.
- For full details on chemical anchors and installation method please contact our Sales team.



ØD	P	B	L	E
M16	65	125	190	170
M20	90	170	260	220
M24	85	210	295	260
M27	100	240	340	300

TEMP °C	TIME TO CURE	
	DRY	WET
0	15 HRS	30 HRS
10	3 HRS	6 HRS
20	30 MINS	1 HR

Installation method

1. Drill correct diameter and depth of hole for the stud.
2. Clean the hole using a brush and air pump.
3. Insert chemical capsule into the hole connect stud to drilling machine using an appropriate driver.
4. Offer stud to capsule and switch on machine. Drive stud into capsule to full depth. To prevent over mixing, stop rotation as soon as bottom of hole is reached. Leave undisturbed until resin has set.
5. Position baseplate and tighten to recommended torque.

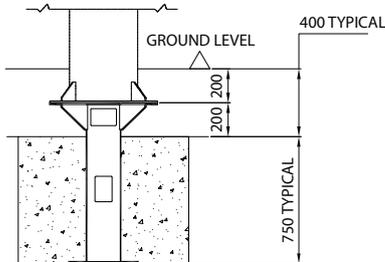
To ensure correct installation of chemical anchor bolts an experienced contractor should be employed.

Buried flange members

- Where underground services restrict the possible location of the foundation/ camera position, buried Flange Members can often overcome congestion & provide a solution. Buried flange members can also be used as an alternative to other standard holding down methods and also to achieve installations typically outlined below, where other methods are not suitable.

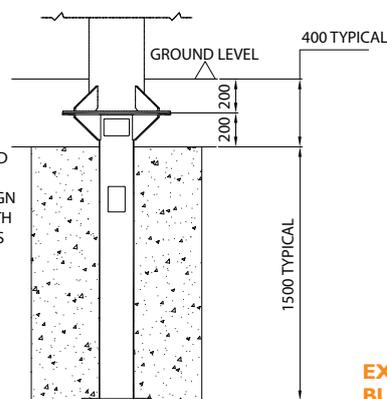
STANDARD

BURIED FLANGE USED INSTEAD OF ANCHOR BOLTS



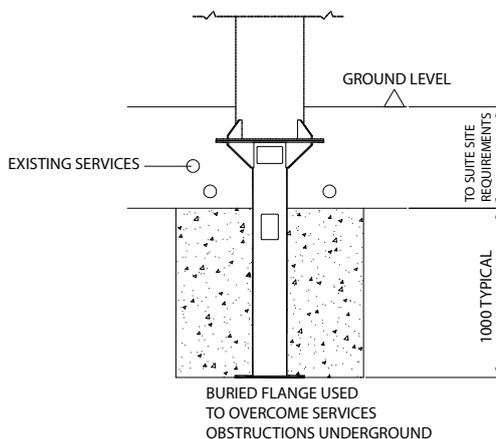
EN 40 BASE

BURIED FLANGE USED FOR DEEP NARROW FOUNDATION - DESIGN IN ACCORDANCE WITH EN40 - ALSO USED AS ALTERNATIVE TO EMBEDDED BASE OPTION ON TALLER POLES

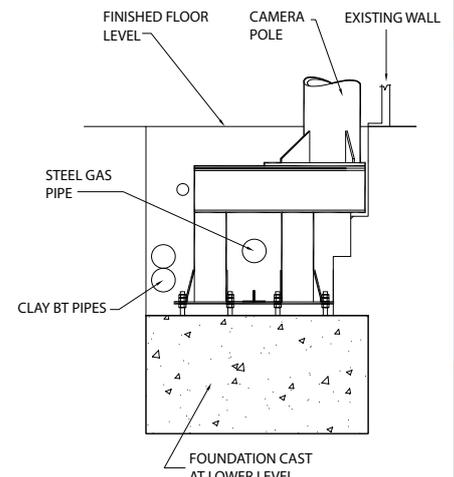
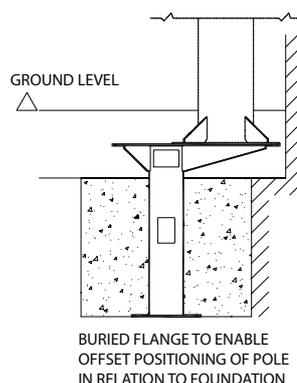


EXAMPLE OF SPECIAL BURIED FLANGE DESIGN

OVERCOMING SERVICES



OFFSET COLUMN



→ Manufacturing & Design Standards

All products in this brochure are manufactured to the following standards.

Design

Poles

Windloading and structural design in accordance with ILETR7 (the Institute of Lighting Engineers' Technical Report Number 7 high masts for lighting and CCTV 2000 edition). Design analysis is carried out using a specialist software package in accordance with ILETR7, BS6399 and BS8100. We also produce designs in accordance with EN40/BS5649 and BD94/07 (Highways structures design : Design of minor structures)

Towers

Windloading and structural design is carried out using our specialist software package in accordance with BS8100 PT1, 'Code of practice for loading' and BS8100 PT3, 'Code of practice for strength assessment of members of lattice towers and masts', and fully complies with May 2005 amendment for increased windloading upon structures up to 10 metres above ground level.

Foundations

As standard in accordance with BS8004 for a safety factor better than 2:1. We can design to BD94/07 for highways and BSEN40 where required, for planted/direct burial foundations.

Material and Finishing

- Structural steel hollow sections EN10219 – EN10025:2004
- Steel flat angles and structural sections EN10025, EN10111, EN 10130
- Stainless steel sections Grade 304 ,316
- Aluminium section Grade 6082
- Foundation bolts Grade 4.6 spun galvanised BS4190, BS3692, DIN931, 934, 601
- Fixings: stainless steel Grade A2, galvanised Grade 4.6 – Grade 8.8 – BS4190, BS3692, DIN 931, 934, 601
- Hot dipped galvanising after fabrication to ISO 1461
- Painting in BS and RAL colours in accordance with BS4800

Manufacturing

- Welding Procedures conform with BSEN 1011: 1998, BSEN 287
- Testing procedures for welders where applicable to BSEN 15614

Winches

- Wire ropes to BS183/5281
- Winches conform with American ASAE standard S361.IT.



AW 1545 with dual lighting arm



Stainless steel pole London Eye



AW1545/6TD/BAS



AW1934/4/LHT



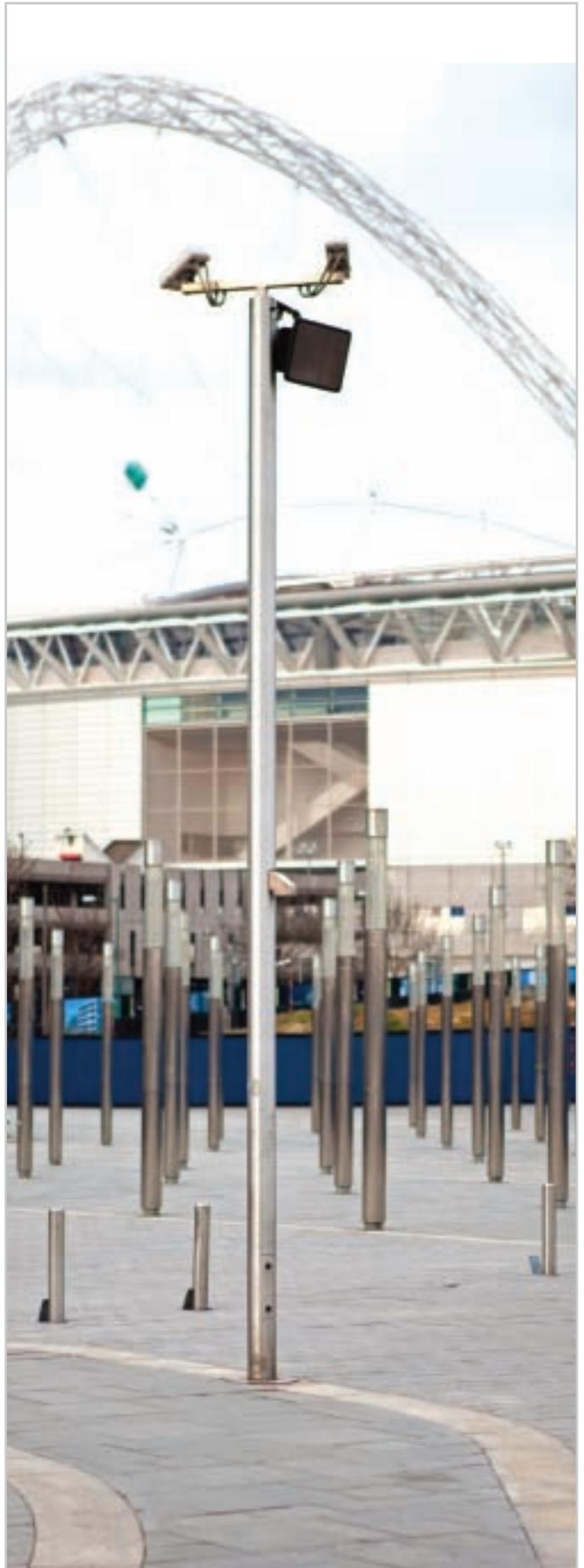
AW1545/12 Marble Arch



AWI859/4



6m cantilever pole with 5m arm



Stainless steel tubular pole Wembley



Inspire a generation

Modular Towers
& Columns



Tubular Poles
Fixed & Tilt Down



Cabinet Based
Poles



Ornate Poles



Transport &
Infrastructure



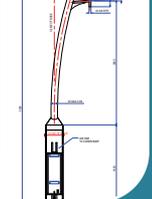
Brackets &
Accessories



Cabinets



Technical



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