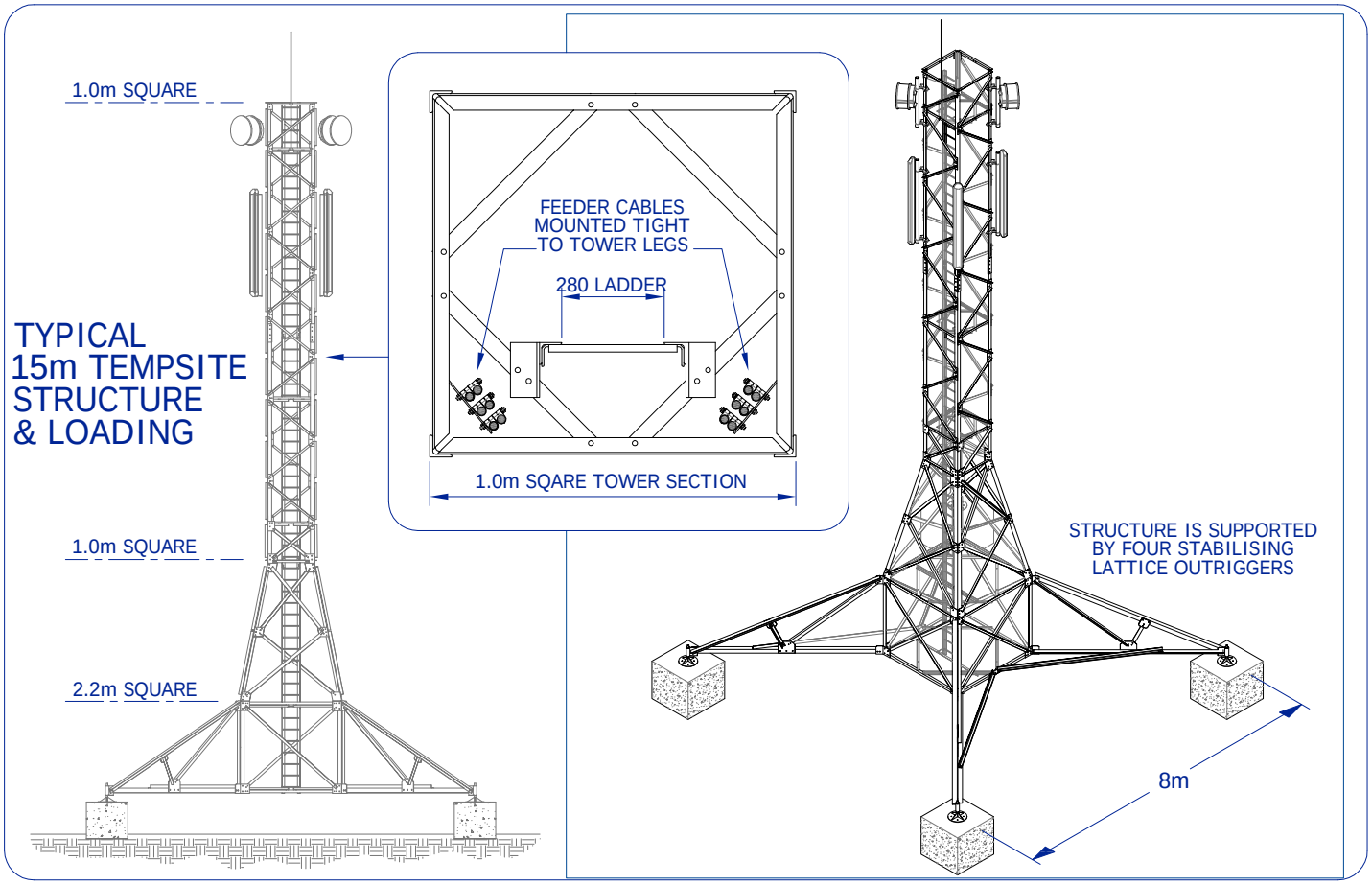
STRUCTURES DATASHEET

15m TEMPSITE RDS - Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT	CONSTRUCTION	STEEL ANGLE
MAIN APPLICATION	CELLULAR & LIGHT BROADCAST	DESIGN STEEL GRADE	SS400 & SS540
PLAN SHAPE	SQUARE	TYPICAL LOADING	3 x GSM, 2 x Dishes
ELEVATION SHAPE	PARALLEL WITH TAPER BASE	SITESHARE CAPACITY	YES
BUILD HEIGHT	15m	UTILISED DESIGN CODES	CP3, BS.5950
FINISH	GALVANISED TO BS.EN.ISO.1461	MIN. GBP REQUIREMENT	30 kN/m²

ATTRIBUTES

Quick to erect, with minimal ground preparation, giving significantly shorter time to `on-air` than conventionally based structures.

All-steel structure with minimal concrete required - ideal for remote areas

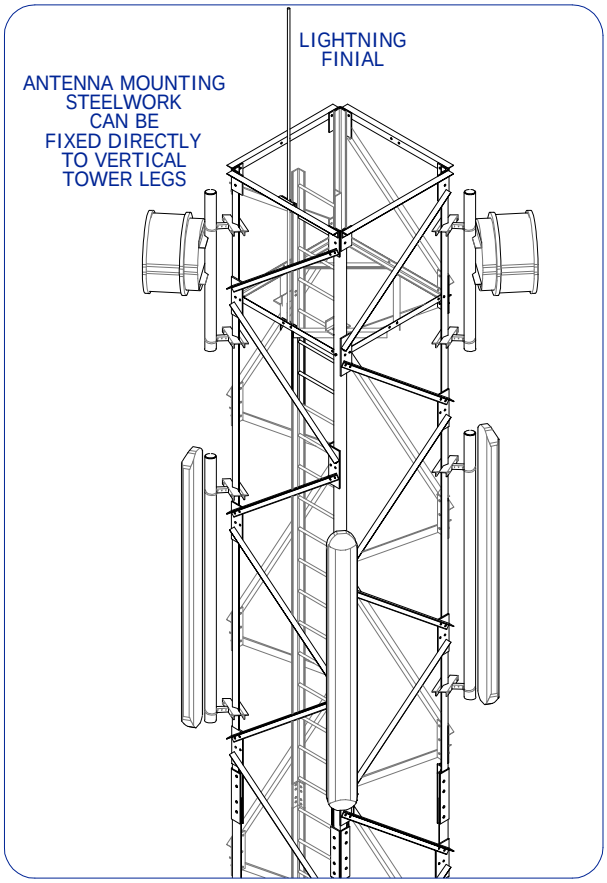
Relocatable, with 100% re-use of steel structure.

PRODUCT DESCRIPTION

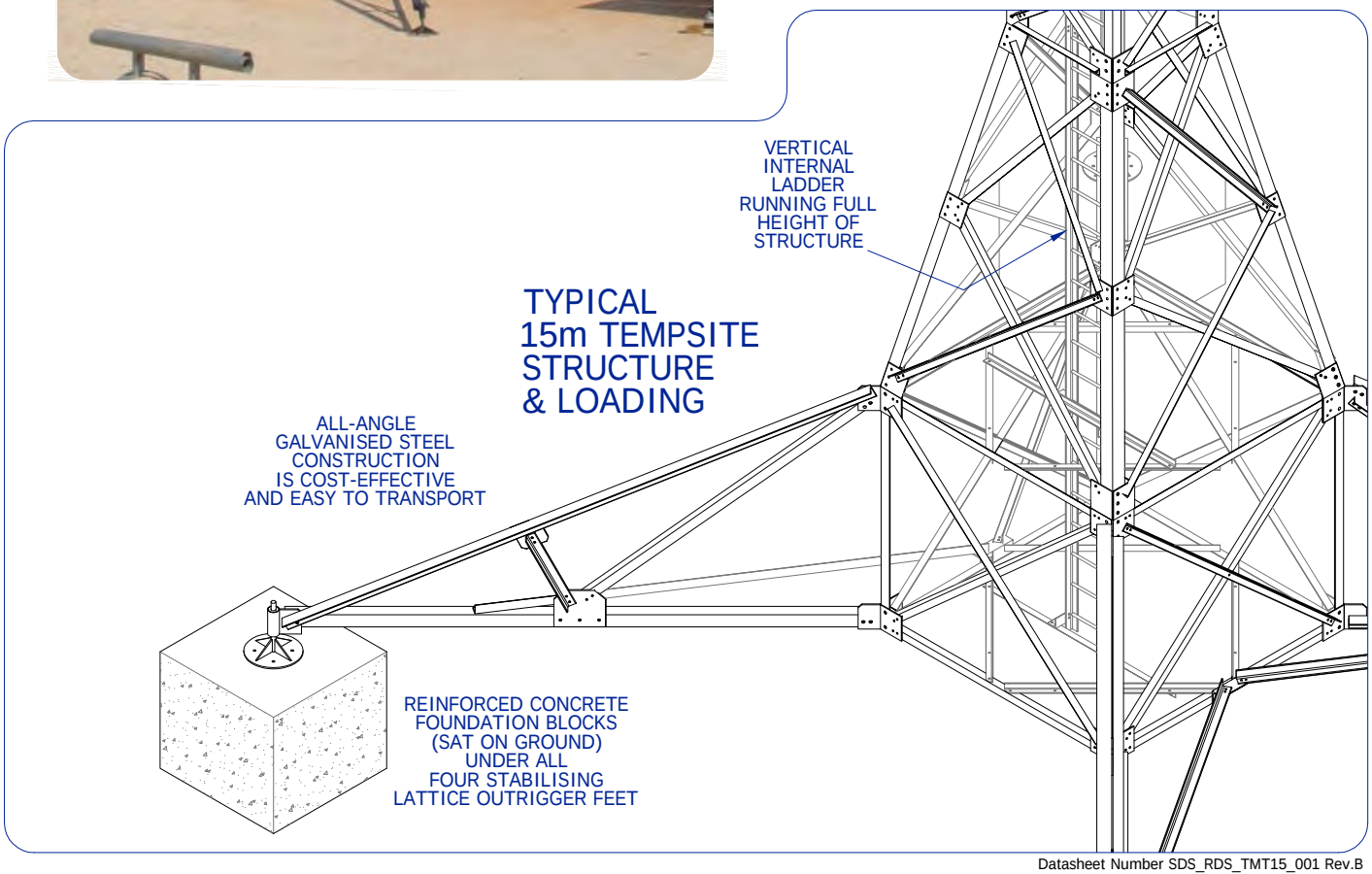
The Tempsite incorporates a multi-purpose, four-legged structure, with angle legs and angle bracings in all panels.
This fast-installation, universal solution provides a temporary facility, especially during high-pressure GSM rollouts.
In such this system will help to facilitate cashflow, and to meet tight contractual schedules.
The `Tempsite` structure has been designed for use in conjunction with an external type BTS unit, or a separately deployed BTS shelter.
As the structure does not rely on mass concrete, all other equipment can be installed immediately the tower assembly is completed.
There is no delay period waiting for foundation concrete to harden, or for foundation approvals.
`Tempsite` can be transported on an 8 ton truck to remote areas, and can be assembled within 6 hours.

STRUCTURES DATASHEET

15m TEMPSITE RDS - Features



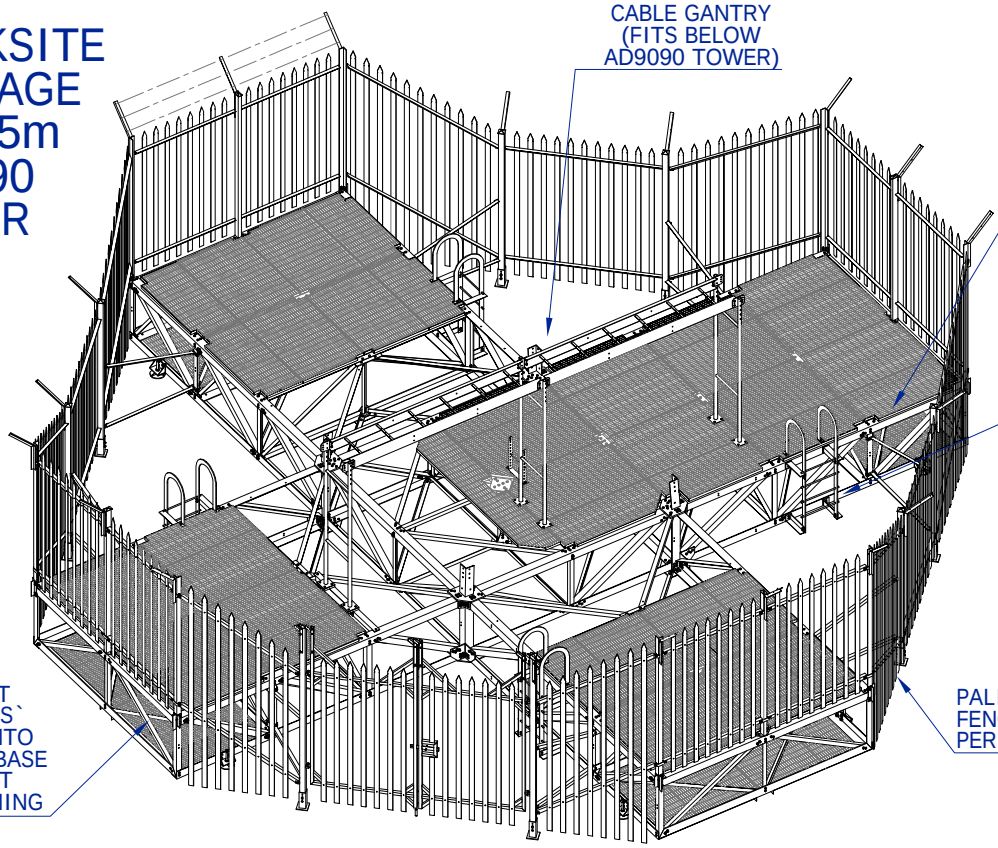
TYPICAL 15m TEMPSITE STRUCTURE & LOADING



STRUCTURES DATASHEET

35@30 QUICKSITE RDS - Overview

QUICKSITE GRILLAGE FOR 35m AD9090 TOWER



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT	CONSTRUCTION	STEEL ANGLE
MAIN APPLICATION	CELLULAR & LIGHT BROADCAST	DESIGN STEEL GRADE	SS400
PLAN SHAPE	SQUARE (AD9090 F BASE TOWER)	TYPICAL LOADING	2m² @ 24m & 27m, 4.5m² @ 39m Design Windspeed = 30m/s
ELEVATION SHAPE	TAPERED (AD9090 F BASE TOWER)	SITESHARE CAPACITY	YES
BUILD HEIGHT	35m AD9090H TOWER	UTILISED DESIGN CODES	CP3, BS.5950
FINISH	GALVANISED TO BS.EN.ISO.1461	MIN. GBP REQUIREMENT	35 KN/m²

ATTRIBUTES

Quick to erect, with minimal ground preparation, giving significantly shorter time to `on-air` than conventionally based structures.

All-steel structure with minimal concrete required - ideal for remote areas

Grillage base supports tower and all equipment, held inside an integral fenced compound.

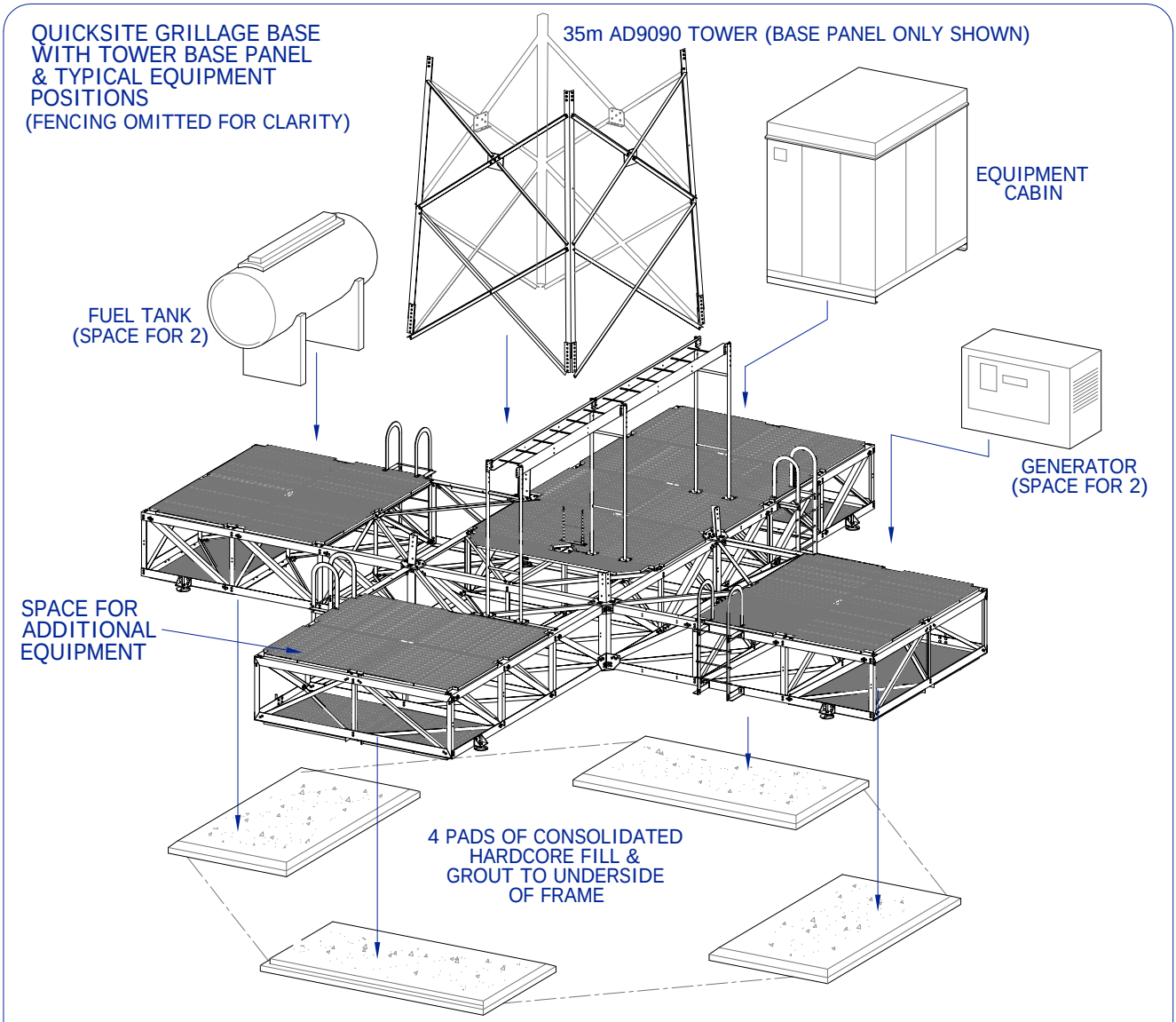
Relocatable, with 100% re-use of structure.

PRODUCT DESCRIPTION

The AD9090 tower is a multi-purpose, four-legged structure, with angle legs and angle bracings in all panels (`A` to `F`).
The Quicksite grillage base is a fast-installation, universal alternative to a conventional concrete foundation. It is intended for use on remote sites with low ground bearing pressure where bulk supplies of good quality concrete for deep foundations are difficult or impossible to obtain economically. As the foundation does not rely on mass concrete, the tower, cabin(s) and other equipment can be installed immediately the grillage assembly is completed. There is no delay period waiting for concrete to harden, or for foundation approvals.
Kentledge can be either stone fill, or (with geotextile box liners) almost any locally excavated subsoil.

STRUCTURES DATASHEET

35@30 QUICKSITE RDS - Features



ALL EQUIPMENT UNITS POSITIONED ON GRILLAGE BASE, INSIDE SECURITY FENCING.
QUICKSITE INSTALLATION HAS A FOOTPRINT OF APPROXIMATELY 12.5m SQUARE.

Datasheet Number SDS_RDS_QS35_001 Rev.C

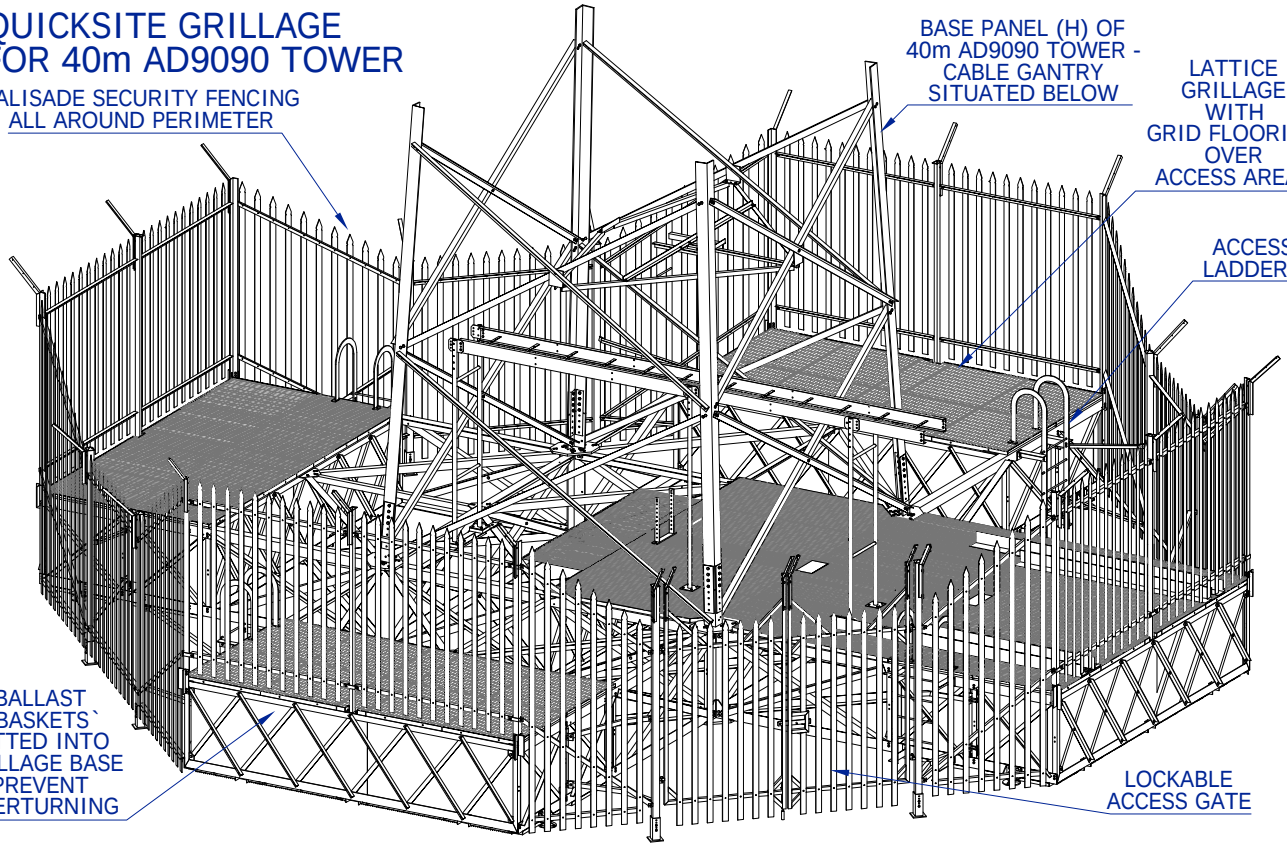
QUICKSITE GRILLAGE BASE WITH TOWER & EQUIPMENT (FENCING NOT SHOWN)

AD9090 TOWER ON QUICKSITE GRILLAGE BASE

STRUCTURES DATASHEET

40@40 QUICKSITE RDS - Overview

QUICKSITE GRILLAGE FOR 40m AD9090 TOWER



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT	CONSTRUCTION	STEEL ANGLE
MAIN APPLICATION	CELLULAR & LIGHT BROADCAST	DESIGN STEEL GRADE	SS400 & SS540
PLAN SHAPE	SQUARE (AD9090 H BASE TOWER)	TYPICAL LOADING	2m² @ 24m & 27m, 4.5m² @ 39m Design Windspeed = 40m/s
ELEVATION SHAPE	TAPERED (AD9090 H BASE TOWER)	SITESHARE CAPACITY	YES
BUILD HEIGHT	40m AD9090H TOWER	UTILISED DESIGN CODES	CP3, BS.5950
FINISH	GALVANISED TO BS.EN.ISO.1461	MIN. GBP REQUIREMENT	40 KN/m²

ATTRIBUTES

Quick to erect, with minimal ground preparation, giving significantly shorter time to `on-air` than conventionally based structures.

All-steel structure with minimal concrete required - ideal for remote areas

Grillage base supports tower and all equipment, held inside an integral fenced compound.

Relocatable, with 100% re-use of structure.

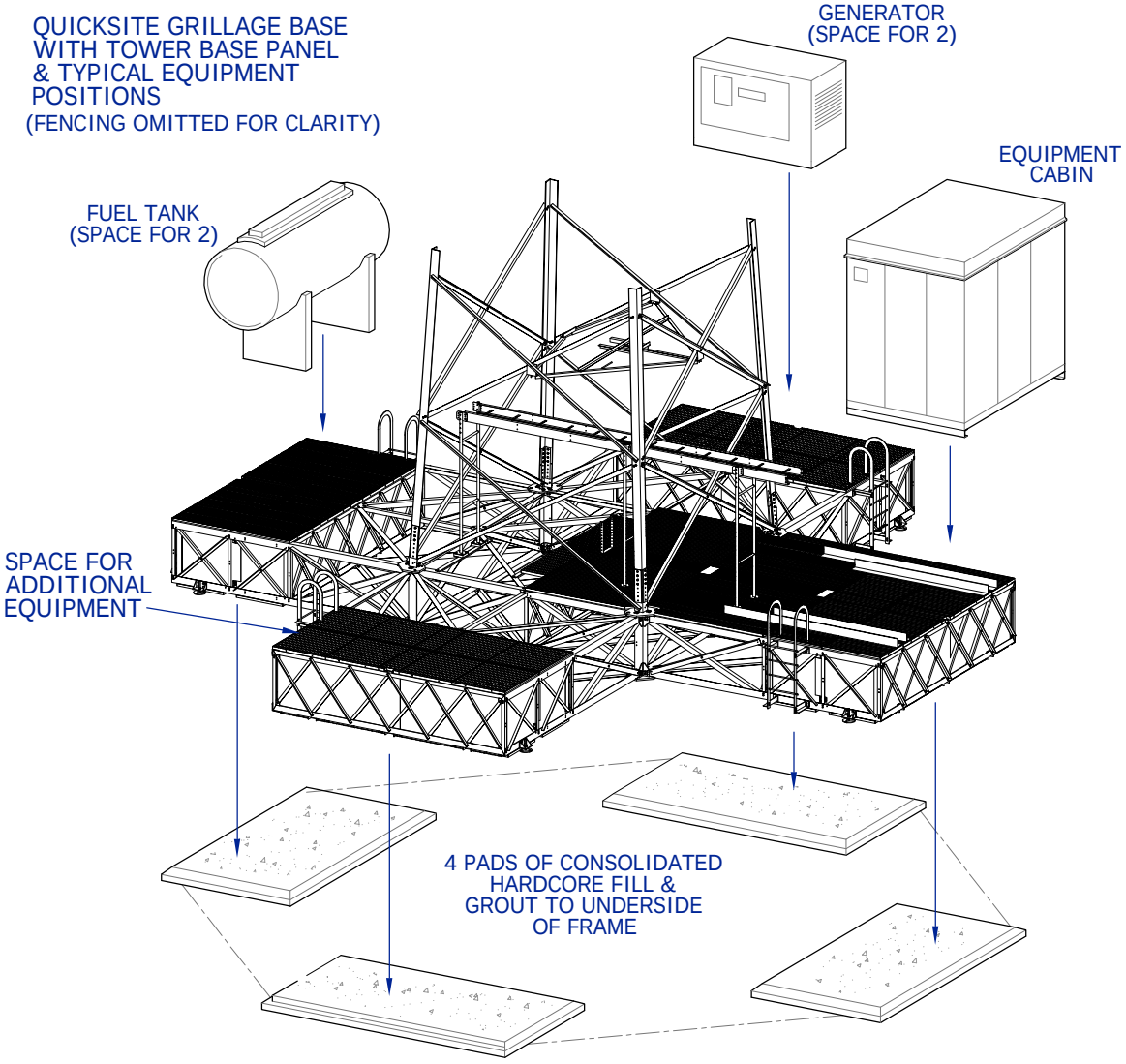
PRODUCT DESCRIPTION

The AD9090 tower is a multi-purpose, four-legged structure, with angle legs and angle bracings in all panels (`A` to `H`).
The Quicksite grillage base is a fast-installation, universal alternative to a conventional concrete foundation. It is intended for use on remote sites with low ground bearing pressure where bulk supplies of good quality concrete for deep foundations are difficult or impossible to obtain economically. As the foundation does not rely on mass concrete, the tower, cabin(s) and other equipment can be installed immediately the grillage assembly is completed. There is no delay period waiting for concrete to harden, or for foundation approvals.
Kentledge can be either stone fill, or (with geotextile box liners) almost any locally excavated subsoil.

STRUCTURES DATASHEET

40@40 QUICKSITE RDS - Features

QUICKSITE GRILLAGE BASE WITH TOWER BASE PANEL & TYPICAL EQUIPMENT POSITIONS
(FENCING OMITTED FOR CLARITY)



ALL EQUIPMENT UNITS POSITIONED ON GRILLAGE BASE, INSIDE SECURITY FENCING.
QUICKSITE INSTALLATION HAS A FOOTPRINT OF APPROXIMATELY 13.5m SQUARE.

Datasheet Number SDS_RDS_QS40_001 Rev.D

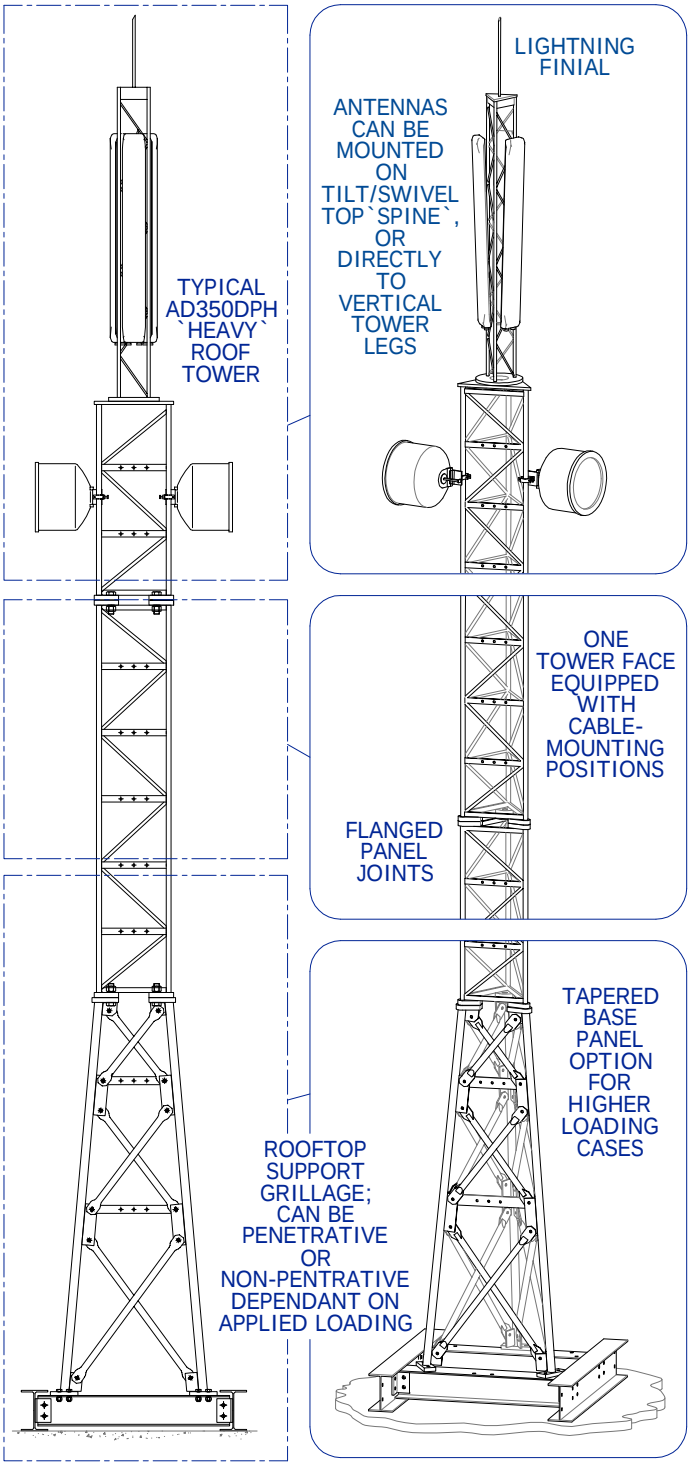
QUICKSITE GRILLAGE BASE
WITH TOWER
& TYPICAL EQUIPMENT
IN POSITION
FENCING NOT SHOWN

AD9090H TOWER ON
QUICKSITE GRILLAGE BASE

QUICKSITE GRILLAGE BASE:
BALLAST `BASKET`
IN POSITION
SHOWN WITH
NON-INTEGRAL FENCE

STRUCTURES DATASHEET

AD350 TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	ROOFTOP TOWER
MAIN APPLICATION	CELLULAR / LIGHT MICROWAVE
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	9m
FACEWIDTH	350mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	FACE CLIMBING
LEG SECTION	ROD
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	SINGLE-CELL; CELLULAR / LIGHT MICROWAVE
SITESHARE CAPACITY	NO
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

A largely weld-construction lattice structure designed as a dedicated universal lightweight rooftop tower

Can be built in heights from 1m up to 9m.

Quick and easy to erect, and can be easily hand-lifted to rooftop sites and erected without a derrick or crane

PRODUCT DESCRIPTION

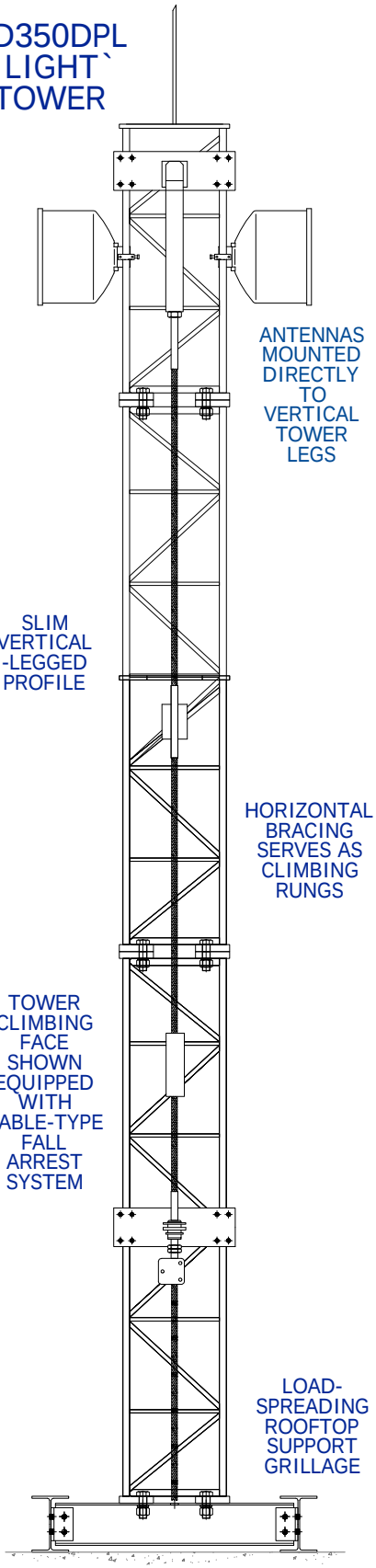
The AD350 has been designed as a dedicated tower for rooftop applications.
Erection of the structure is simple, with largely all-welded panel construction. Tower panels are small and light, making indoor transit to rooftops possible.
This lightweight tower can be supplied to meet a variety of loading capacity requirements.
A range of optional antenna mounts, rest seats, cable management and fall-arrest products is also available for fitment to the AD350.

Datasheet Number SDS_350_001 Rev.A

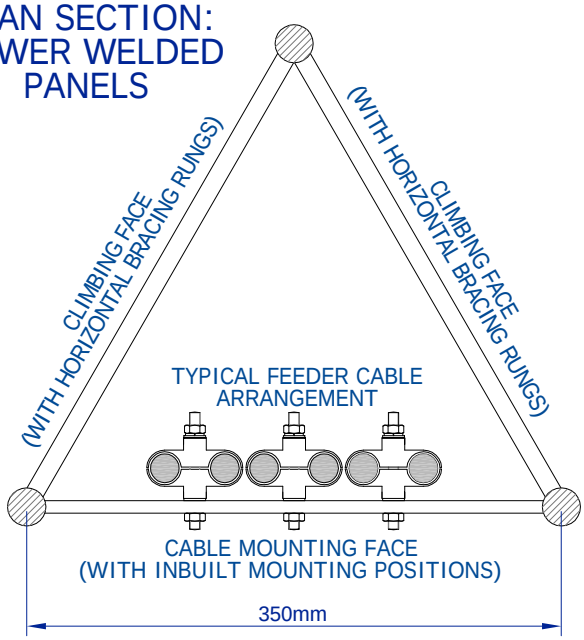
STRUCTURES DATASHEET

AD350 TOWER - Product Overview

AD350DPL `LIGHT` TOWER

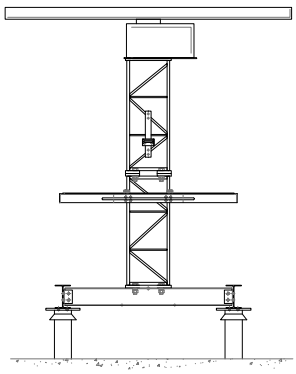


PLAN SECTION: TOWER WELDED PANELS

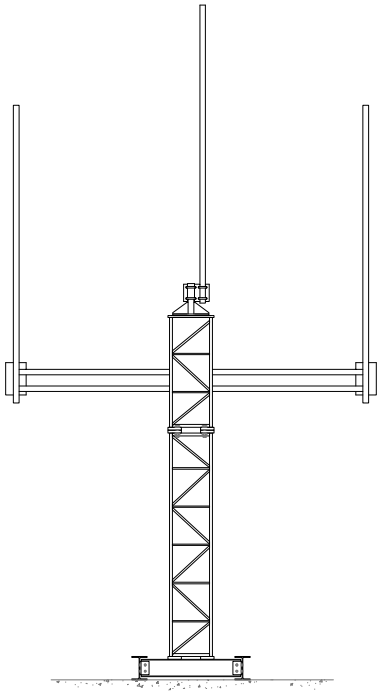


AD350 APPLICATIONS

ANTENNA LOAD CASE VARIATIONS OUTSIDE STANDARD CELLULAR APPLICATIONS



AD350 TOWER CARRYING SURMOUNTED MARINE SCANNER ANTENNA & LOWER MAINTENANCE PLATFORM

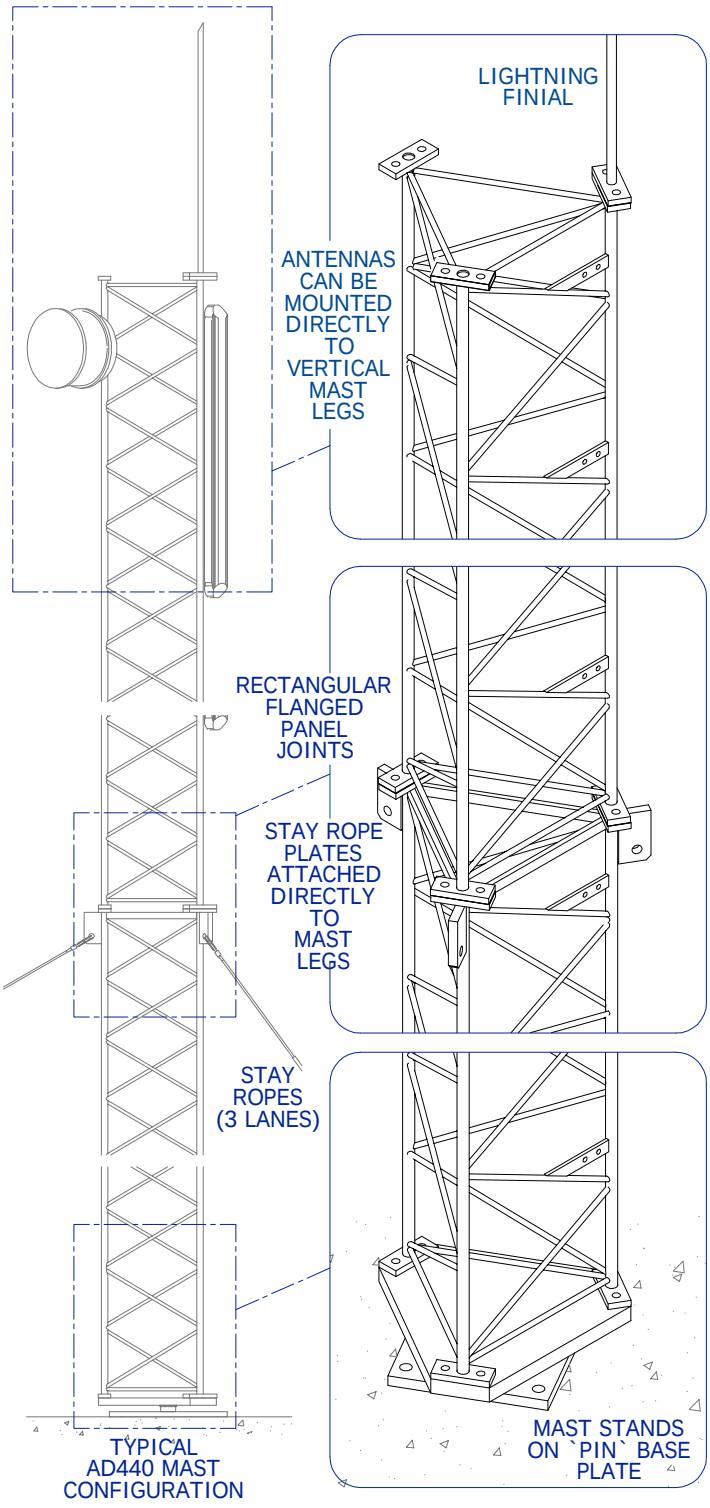


AD350 TOWER CARRYING TWIN BOOM-MOUNTED OMNI-DIRECTIONAL ANTENNAS & SINGLE SURMOUNTED OMNI-DIRECTIONAL ANTENNA

Datasheet Number SDS_350_001 Rev.A

STRUCTURES DATASHEET

AD440 MAST - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	CELLULAR / LIGHT BROADCAST / LIGHT MICROWAVE / RADIATOR / ROOFTOP
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	80m
FACEWIDTH	440mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	FACE CLIMBING
LEG SECTION	ROD
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	CELLULAR / LIGHT BROADCAST / LIGHT MICROWAVE / RADIATOR
SITESHARE CAPACITY	NO
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Panels available in a range of lengths from 1m up to 6m, giving build height flexibility

All-welded lattice steel structure can be used as a lightweight guyed mast or rooftop stub tower

Quick and easy to erect

PRODUCT DESCRIPTION

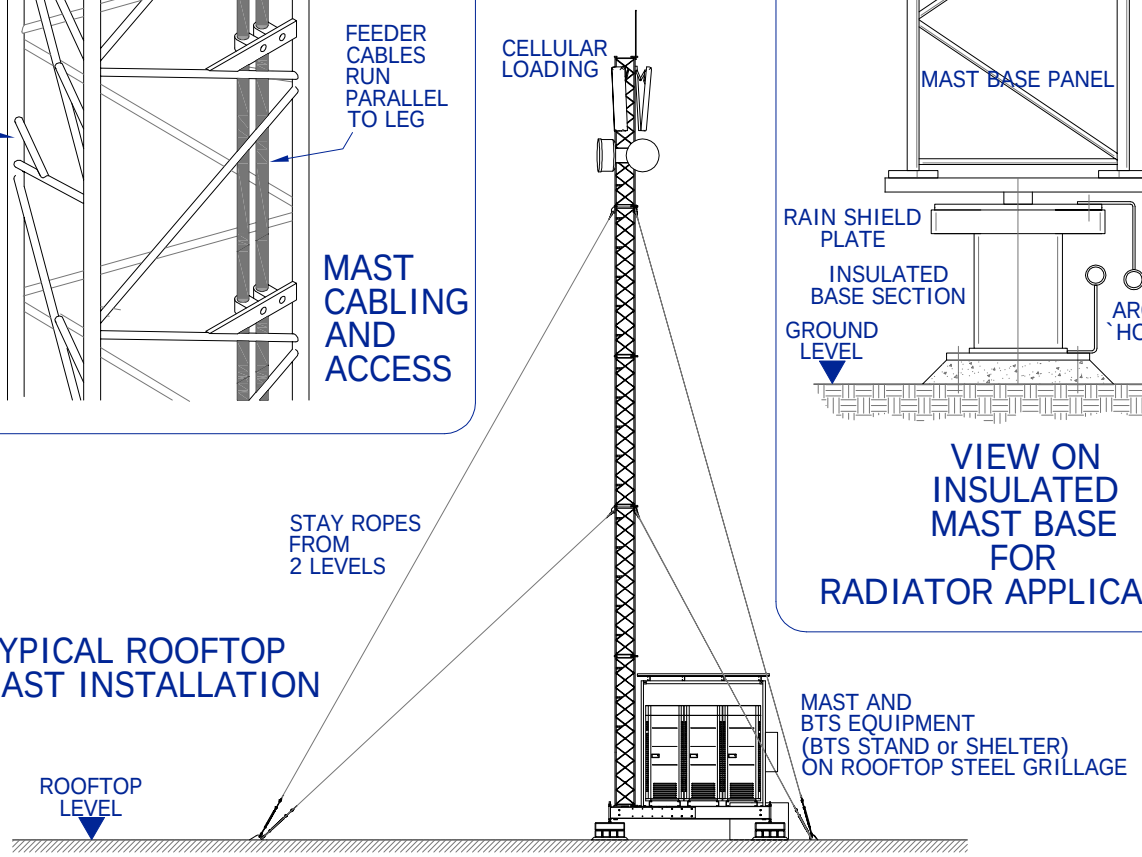
The AD440 has been designed as a multi-purpose range of sections for general mast and rooftop tower applications.
Panels are available in many steel sizes and grades, which enables global manufacture.
Erection of the structure is simple, using a simple derrick.
Heavy sections are available for increased loading and feeder capacity requirements.

Datasheet Number SDS_440_001 Rev.B

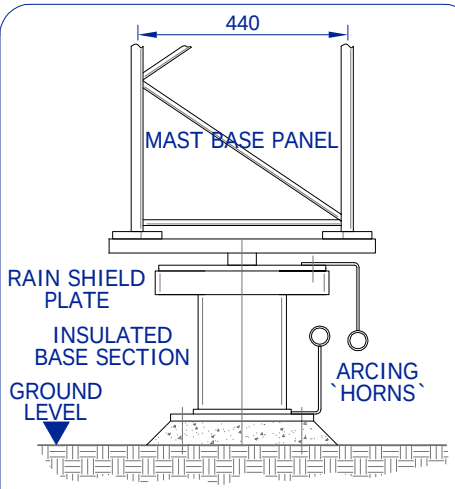
STRUCTURES DATASHEET

AD440 MAST - Product Overview

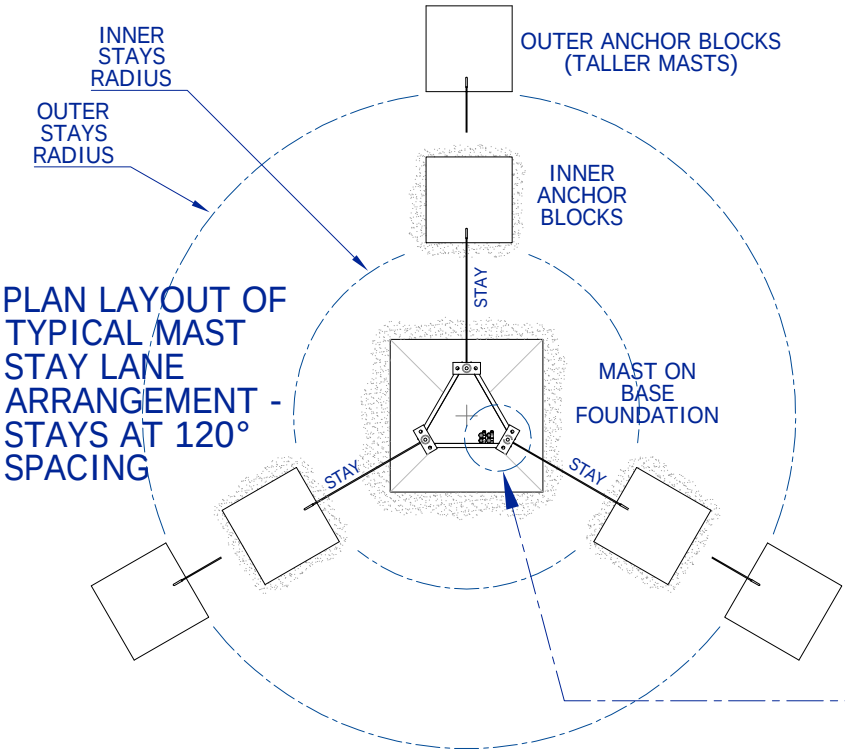
MAST CABLING AND ACCESS



TYPICAL ROOFTOP MAST INSTALLATION

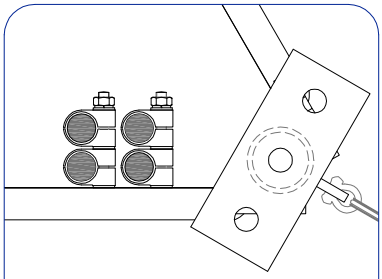


VIEW ON INSULATED MAST BASE FOR RADIATOR APPLICATION



PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADII
35m MAST	25m	--
40m MAST	28m	--
55m MAST	35m	--
70m MAST	25m	55m
80m MAST	20m	40m & 60m
Please Note; these figures are given as a rough guide only		

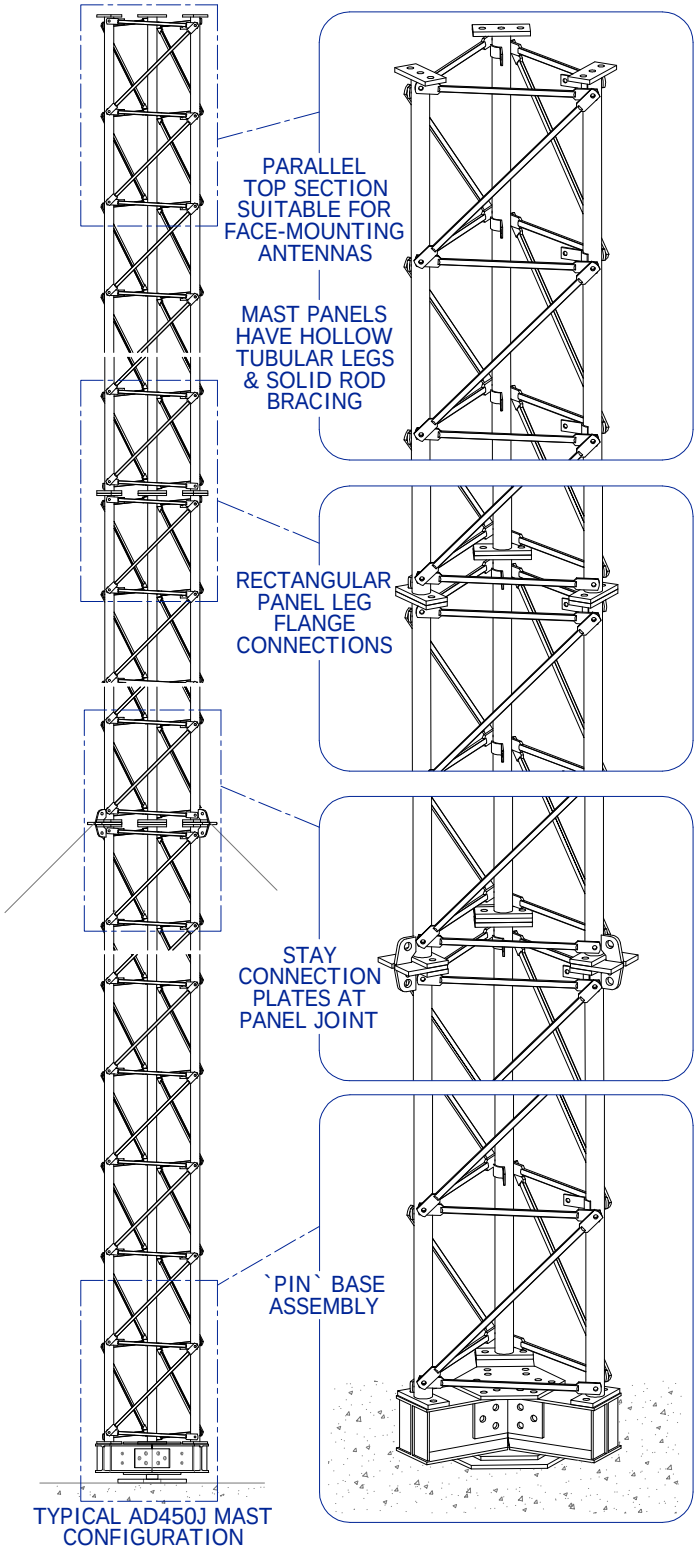


FEEDER CABLE POSITIONS

Datasheet Number SDS_440_001 Rev.B

STRUCTURES DATASHEET

AD450J MAST - Product Overview



TYPICAL AD450J MAST CONFIGURATION

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	CELLULAR / MICROWAVE
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	80m
FACEWIDTH	450mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	FACE CLIMBING
LEG SECTION	TUBE
BRACE SECTION	SOLID ROUND BAR
DESIGN STEEL GRADE	S275
TYPICAL LOADING	CELLULAR / MICROWAVE
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

`Flat-pack` construction enables easy and efficient transportation

Can be assembled and erected with minimal equipment

Can be erected quickly in remote areas

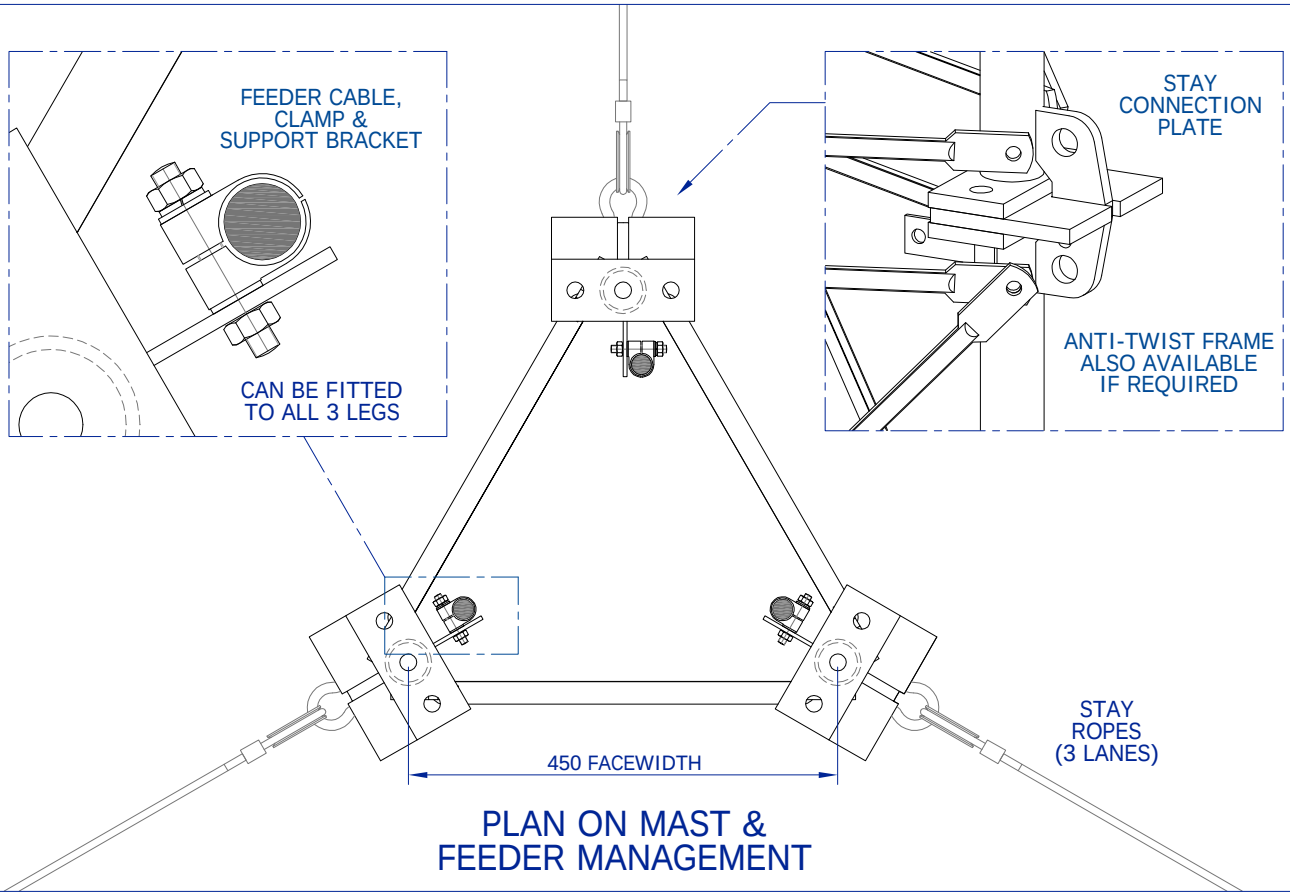
PRODUCT DESCRIPTION

The AD450J is a low-profile triangular lattice mast developed for use in remote areas where transport of structure and equipment is difficult.
The structure is `flat-pack`, and can be carried and erected with minimal equipment.
Furthermore, the AD450J is designed to deflection criteria suitable for microwave links.
The structure is fully galvanised, including the internal surfaces of its tubular steel legs.
Fabrication is quick and simple, with designs for global manufacture available.

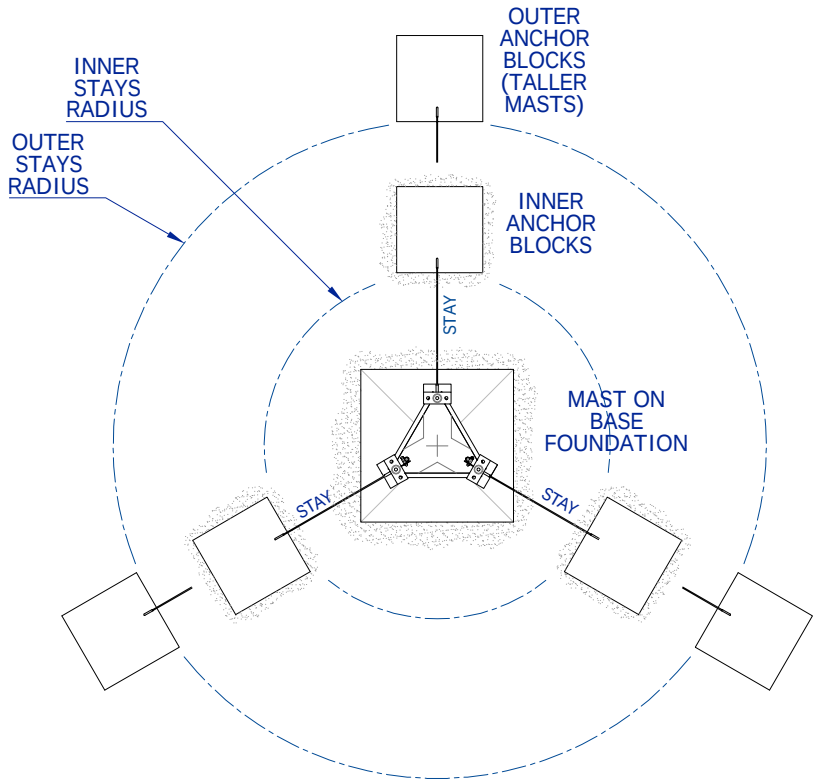
Datasheet Number SDS_450J_001 Rev.B

STRUCTURES DATASHEET

AD450J MAST - Features



PLAN ON MAST & FEEDER MANAGEMENT

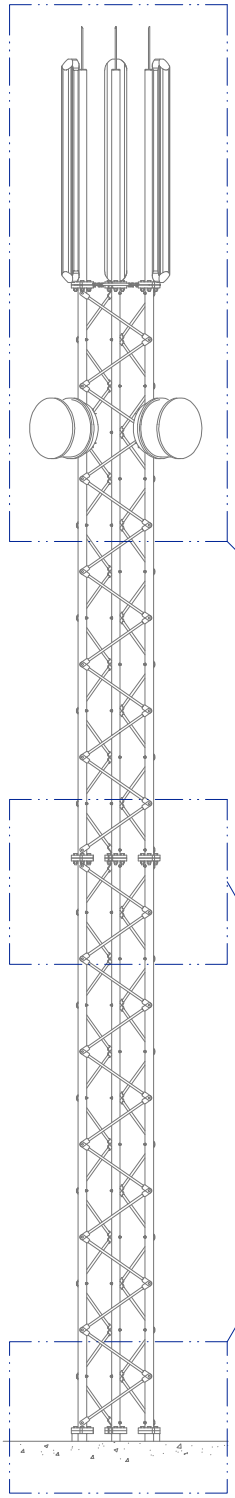


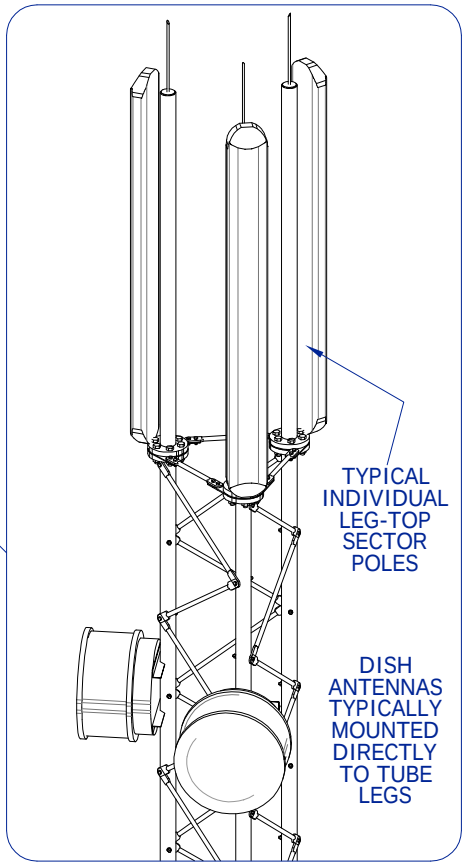
EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADII
20m MAST	11m	---
40m MAST	22m	---
50m MAST	25m	---
60m MAST	18m	35m
70m MAST	18m	45m
Please Note; these figures are given as a rough guide only		

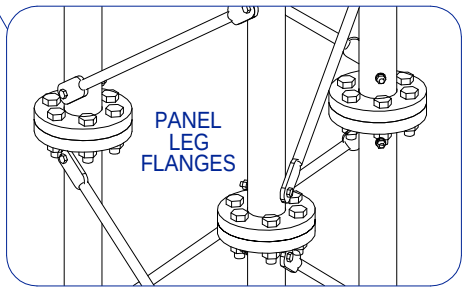
PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

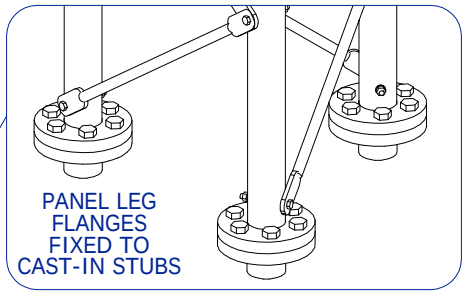
STRUCTURES DATASHEET

AD703 TOWER - Product Overview









STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	21m
FACEWIDTH	700mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	BRACING RUNGS
LEG SECTION	TUBE
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
TYPICAL LOADING	3 or 6 x GSM, 2 or 4 x ø0.6m DISH
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

LOW VISUAL IMPACT DUE TO SLIM, GUSSETLESS CONSTRUCTION

HIGH WINDSPEED/LOADING RATIO

DISCREET BUT ACCESSIBLE FEEDER CABLE POSITIONS

PRODUCT DESCRIPTION

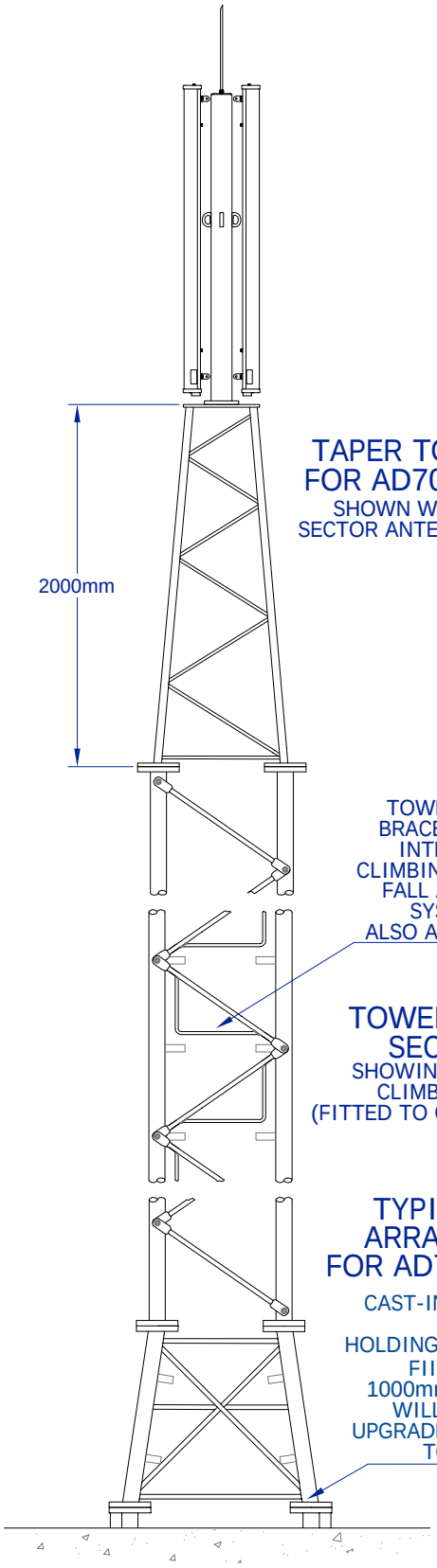
The AD703 is a low-profile triangular lattice tower developed primarily as a low visual impact solution for the worldwide cellular market.

Ideally suited to carry Cross-Polar Antennas, headloading is reduced. This in turn facilitates the tower`s slim profile.
Furthermore, the AD703 is designed to deflection criteria suitable for microwave links.
The structure is fully galvanised, including the internal surfaces of its tubular steel legs. Panel modules are 3m or 6m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.
The AD703 has proved to be popular with planning authorities, and continues to be employed on a widespread basis by worldwide cellular networks.

Datasheet Number SDS_703_001 Rev.B

STRUCTURES DATASHEET

AD703 TOWER - Features



TAPER TOP OPTION FOR AD703 TOWERS

SHOWN WITH TYPICAL SECTOR ANTENNA HEADLOAD

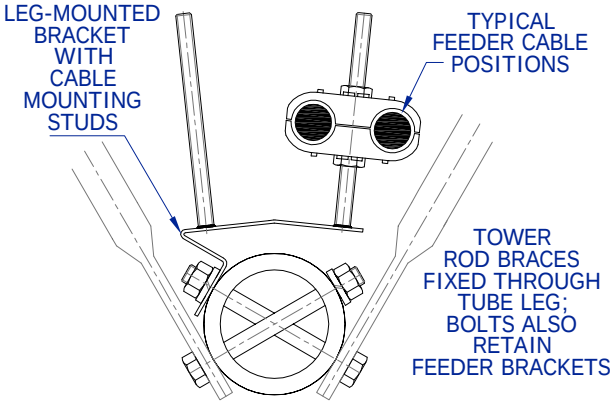
TOWER ROD BRACES WITH INTEGRAL CLIMBING RUNGS; FALL ARREST SYSTEM ALSO AVAILABLE

TOWER PANEL SECTION

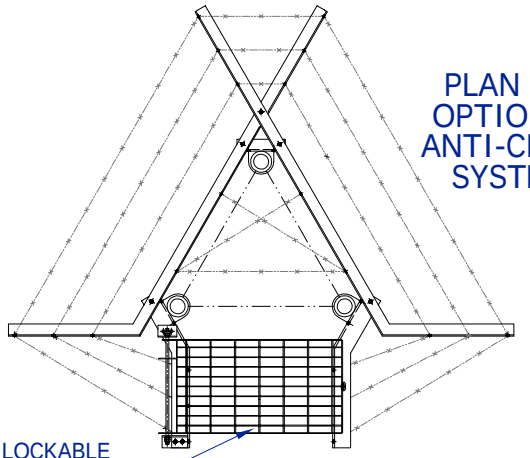
SHOWING OPTIONAL CLIMBING RUNS (FITTED TO ONE FACE ONLY)

TYPICAL BASE ARRANGEMENT FOR AD703 TOWERS

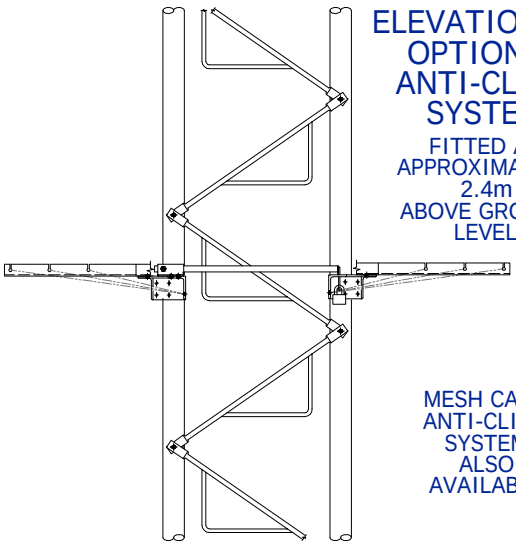
CAST-IN LEG STUBS OR HOLDING DOWN BOLTS FIITED AT 1000mm CENTRES WILL ACCEPT UPGRADE TO AD1003 TOWER



TYPICAL LEG BOLTING & FEEDER BRACKET FIXING



PLAN ON OPTIONAL ANTI-CLIMB SYSTEM



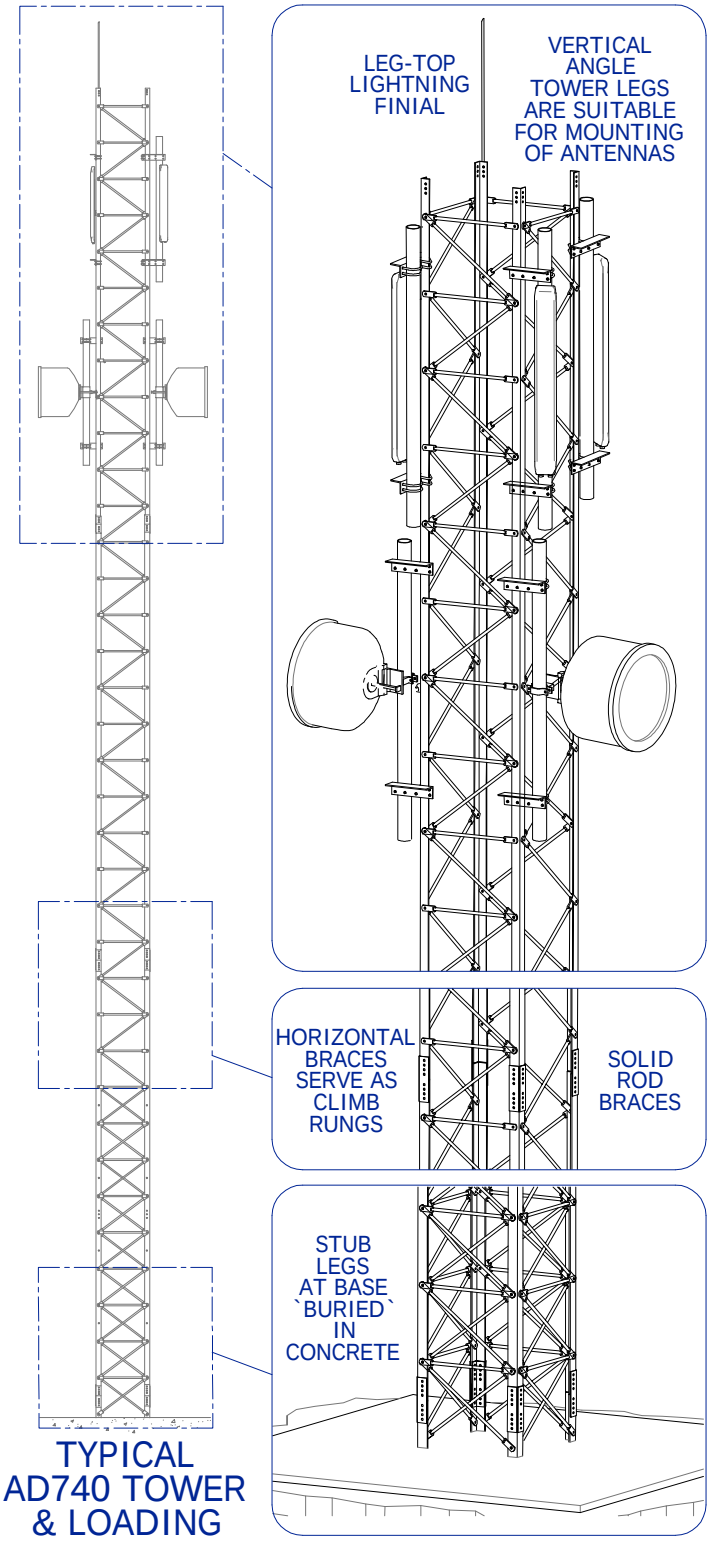
ELEVATION ON OPTIONAL ANTI-CLIMB SYSTEM

FITTED AT APPROXIMATELY 2.4m ABOVE GROUND LEVEL

Datasheet Number SDS_703_001 Rev.B

STRUCTURES DATASHEET

AD740 TOWER - Product Overview



TYPICAL AD740 TOWER & LOADING

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	2-USER CELLULAR / MICROWAVE (CAN BE ROOF-MOUNTED)
PLAN SHAPE	SQUARE
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	20m
FACEWIDTH	740mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	FACE CLIMBING
LEG SECTION	ANGLE
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	2-USER CELLULAR / MICROWAVE
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Lightweight tower that is equally suited to greenfield and rooftop applications

Economical manufacture

Easy to `flat-pack` for transit to sites and rooftops

Quick and simple to erect

PRODUCT DESCRIPTION

The AD740 is a low-profile square lattice tower developed primarily as a low visual impact solution for the worldwide cellular market.
It is ideally suited to carry Cross-Polar Antennas, but is also designed to deflection criteria suitable for microwave links.
The structure is fully galvanised, and panel modules vary from 2.5m to 6m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.
The AD740 has proved to be popular with planning authorities, and continues to be employed on a widespread basis by worldwide cellular networks.

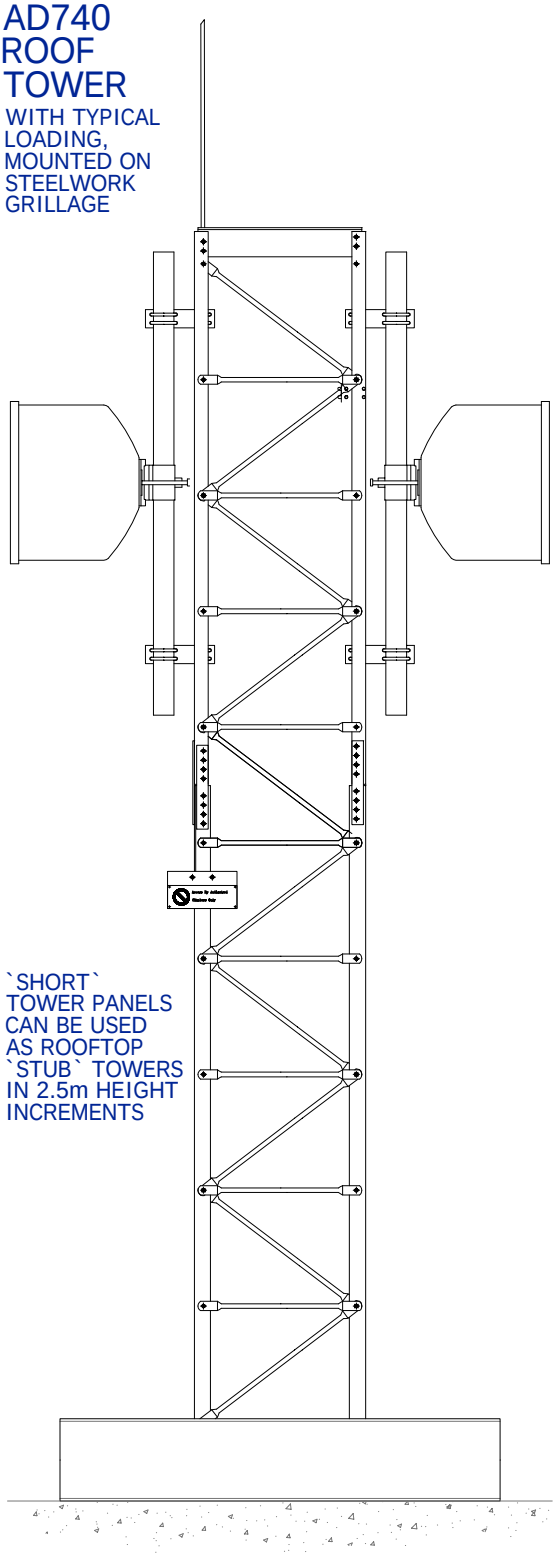
Datasheet Number SDS_740_001 Rev.A

STRUCTURES DATASHEET

AD740 TOWER - Features

AD740 ROOF TOWER

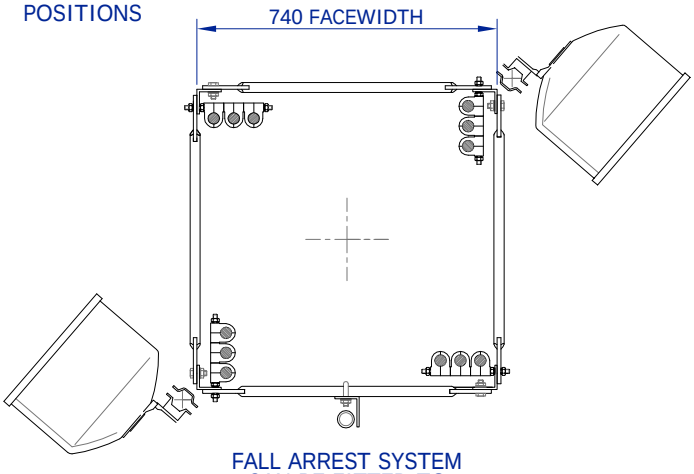
WITH TYPICAL LOADING, MOUNTED ON STEELWORK GRILLAGE



`SHORT` TOWER PANELS CAN BE USED AS ROOFTOP `STUB` TOWERS IN 2.5m HEIGHT INCREMENTS

TOWER PLAN

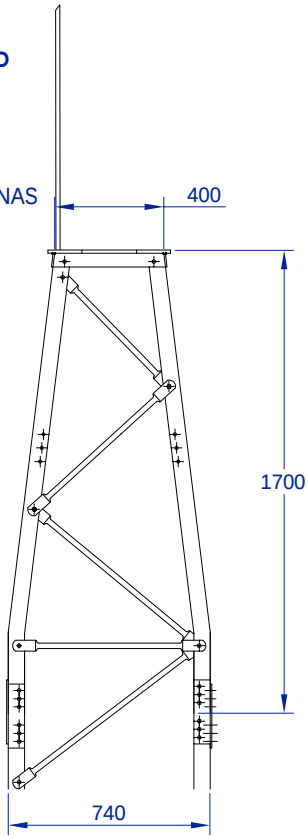
WITH TYPICAL LOADING & FEEDER CABLE POSITIONS



FALL ARREST SYSTEM CAN BE FITTED TO BRACES AT THE CENTRE OF THE CLIMBING FACE

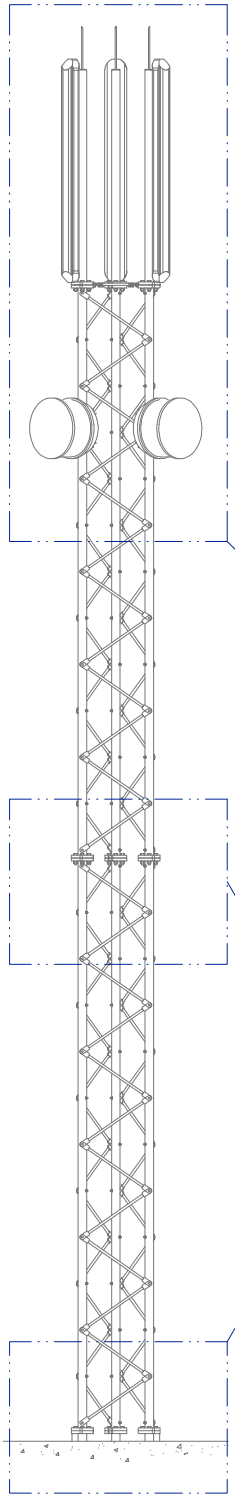
OPTIONAL TAPERED TOP PANEL

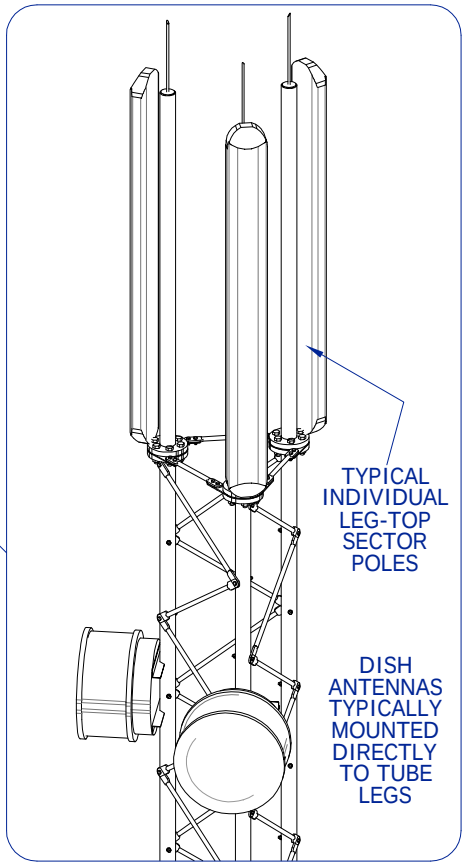
AVAILABLE WITH MOUNTING FACILITY FOR ADDITIONAL ANTENNAS ON TOP PLATE

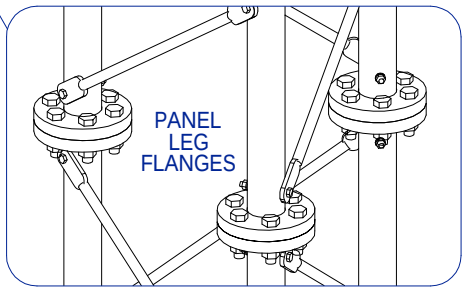


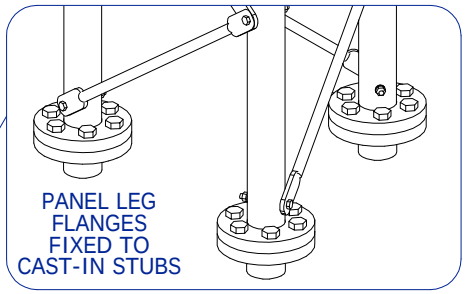
STRUCTURES DATASHEET

AD1003 TOWER - Product Overview









STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	30m
FACEWIDTH	1000mm
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	BRACING RUNGS
LEG SECTION	TUBE
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
TYPICAL LOADING	3 or 6 x GSM, 2 or 4 x ø0.6m DISH
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

LOW VISUAL IMPACT DUE TO SLIM, GUSSETLESS CONSTRUCTION

HIGH WINDSPEED/LOADING RATIO

DISCREET BUT ACCESSIBLE FEEDER CABLE POSITIONS

PRODUCT DESCRIPTION

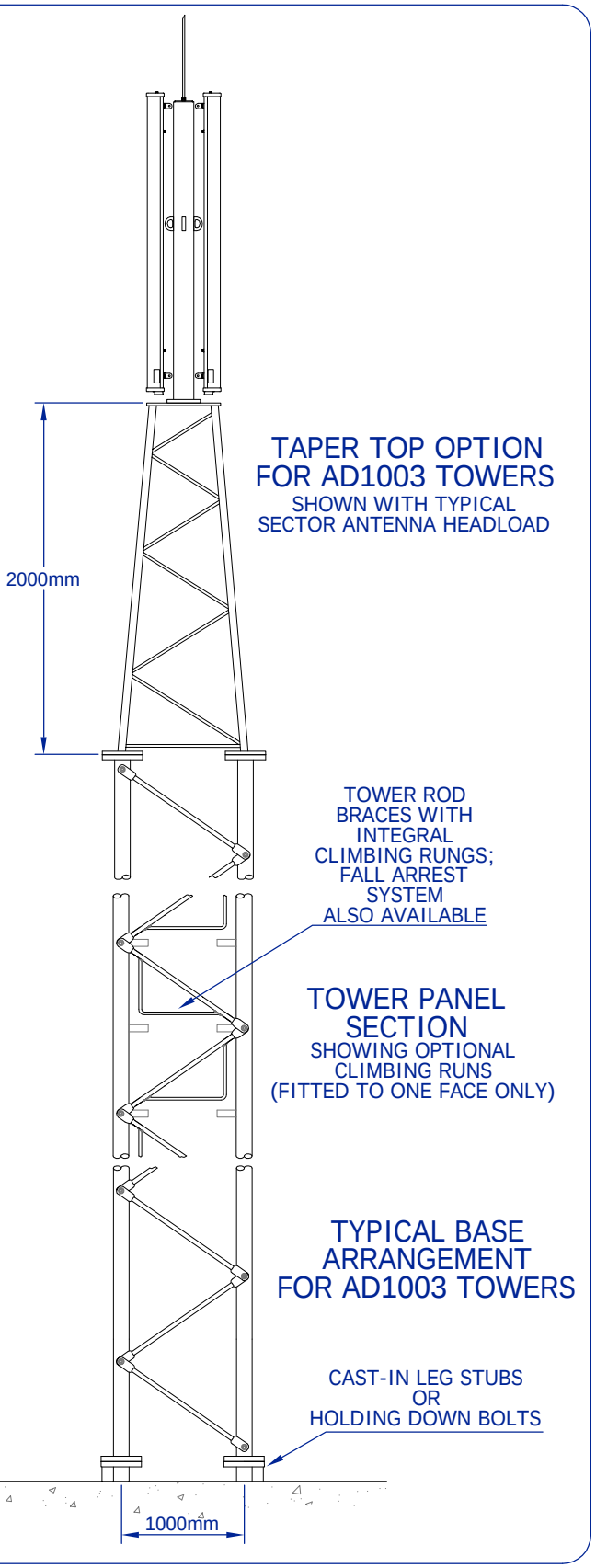
The AD1003 is a low-profile triangular lattice tower developed primarily as a low visual impact solution for the worldwide cellular market.

Ideally suited to carry Cross-Polar Antennas, headloading is reduced. This in turn facilitates the tower`s slim profile.
Furthermore, the AD1003 is designed to deflection criteria suitable for microwave links.
The structure is fully galvanised, including the internal surfaces of its tubular steel legs. Panel modules are 3m or 6m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.
The AD1003 has proved to be popular with planning authorities, and continues to be employed on a widespread basis by worldwide cellular networks.

Datasheet Number SDS_1003_001 Rev.C

STRUCTURES DATASHEET

AD1003 TOWER - Features



TAPER TOP OPTION FOR AD1003 TOWERS

SHOWN WITH TYPICAL SECTOR ANTENNA HEADLOAD

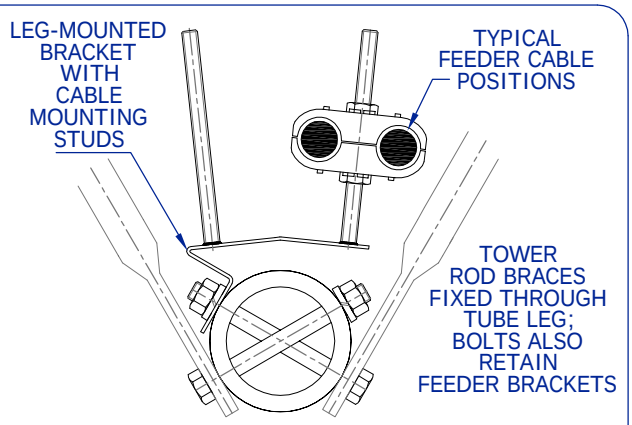
TOWER ROD BRACES WITH INTEGRAL CLIMBING RUNGS; FALL ARREST SYSTEM ALSO AVAILABLE

TOWER PANEL SECTION

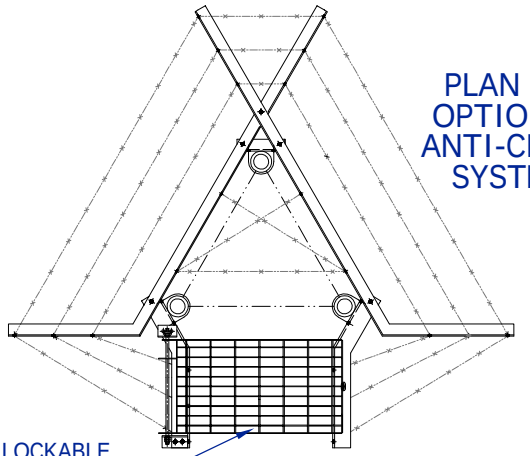
SHOWING OPTIONAL CLIMBING RUNS (FITTED TO ONE FACE ONLY)

TYPICAL BASE ARRANGEMENT FOR AD1003 TOWERS

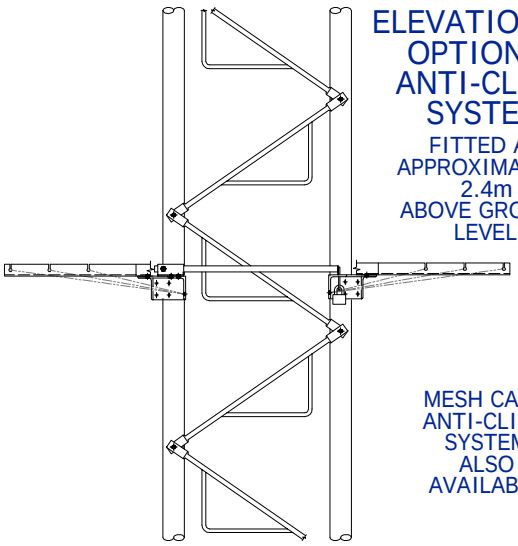
CAST-IN LEG STUBS OR HOLDING DOWN BOLTS



TYPICAL LEG BOLTING & FEEDER BRACKET FIXING



PLAN ON OPTIONAL ANTI-CLIMB SYSTEM



ELEVATION ON OPTIONAL ANTI-CLIMB SYSTEM

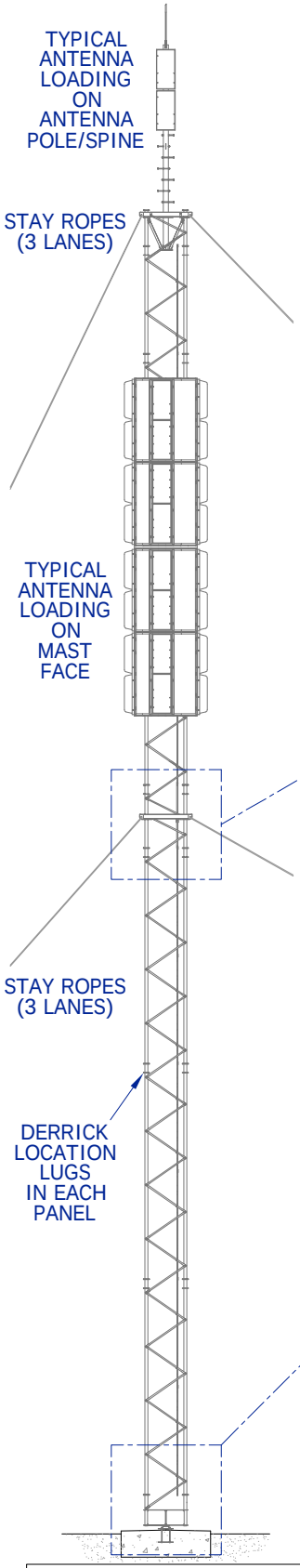
FITTED AT APPROXIMATELY 2.4m ABOVE GROUND LEVEL

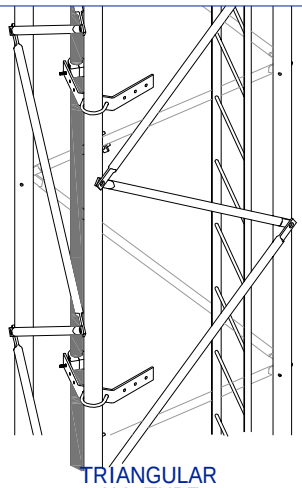
MESH CAGE ANTI-CLIMB SYSTEM ALSO AVAILABLE

Datasheet Number SDS_1003_001 Rev.C

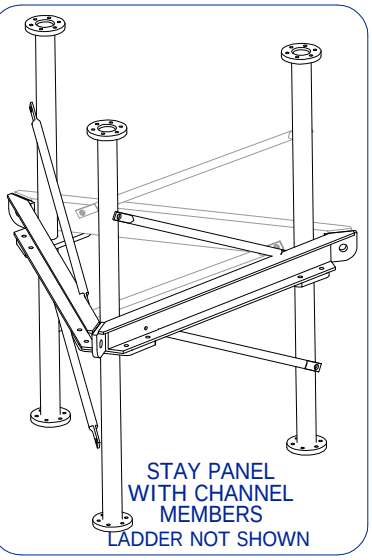
STRUCTURES DATASHEET

AD1050 MAST - Product Overview

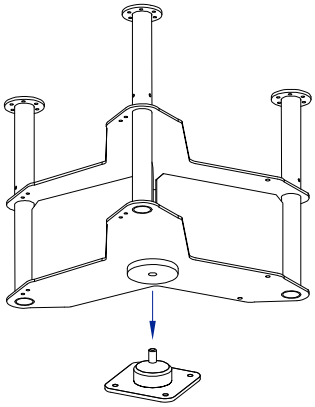




TRIANGULAR ALL-TUBE LATTICE CONSTRUCTION



STAY PANEL WITH CHANNEL MEMBERS LADDER NOT SHOWN



BASE PANEL AND PIN BASE PLATE

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	BROADCAST
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	200m
FACEWIDTH	1050mm
PLATFORM SPACING	IN STAY PANELS WITH CLAMP-ON PLATFORMS AS REQUIRED
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	TUBE
BRACE SECTION	TUBE
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	LIGHT/MEDIUM BROADCAST, MEDIUM CELLULAR
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100, CP3, EIA222F & OTHERS
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Lightweight and quick to erect

Feeder brackets have large capacity and are positioned for easy access

Flexible platform positions

Tubular construction gives good wind efficiency

Integrated derrick system

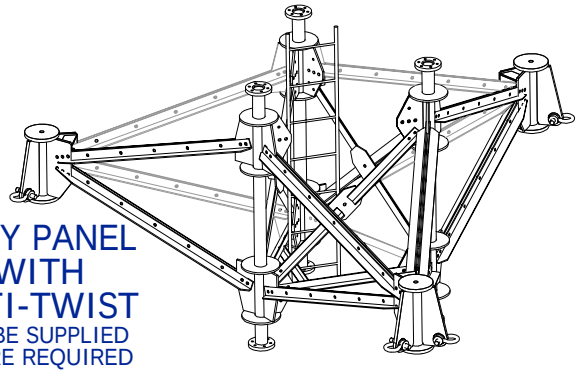
Datasheet Number SDS_1050_001 Rev.B

PRODUCT DESCRIPTION

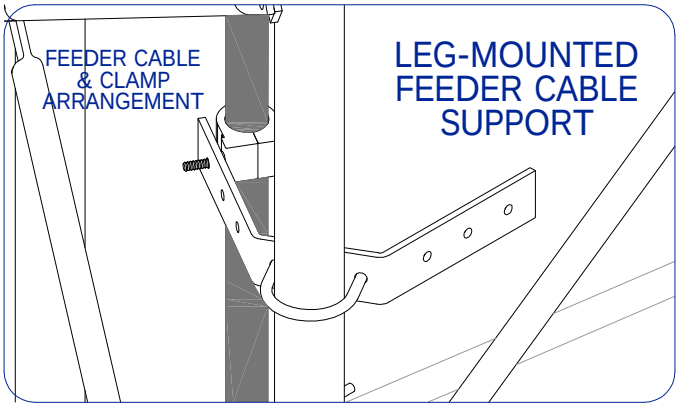
Designed primarily as a multi-user mast, the AD1050 is very light for its` loading capacity, and capable of being easily upgraded for heavier loads.
A full derrick system is available which attaches directly to the mast for quick and easy erection.
The design of the AD1050 will accommodate substitution of member sizes to suit steel availability and design upgrades.

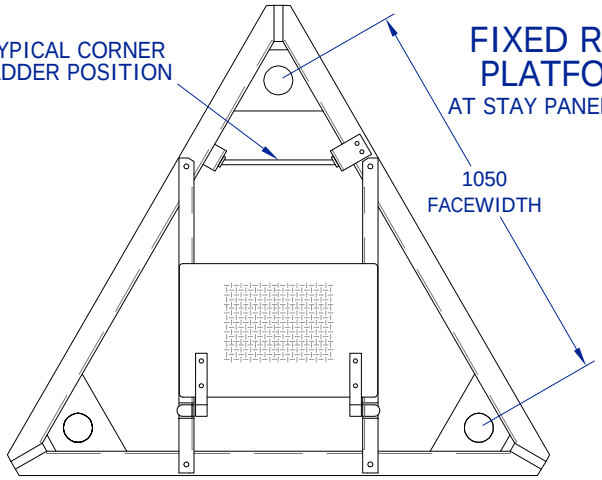
STRUCTURES DATASHEET

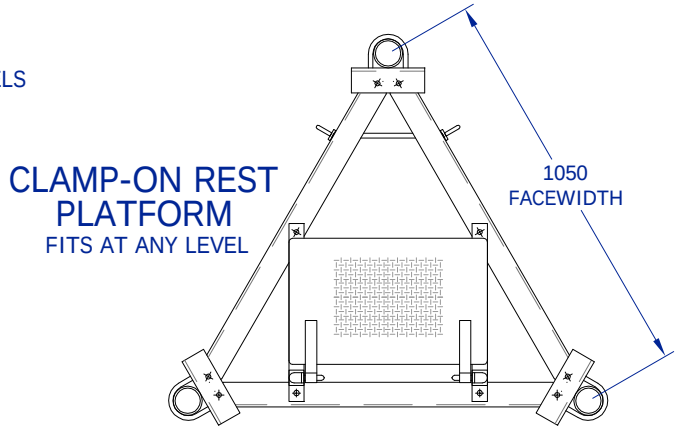
AD1050 MAST - Features



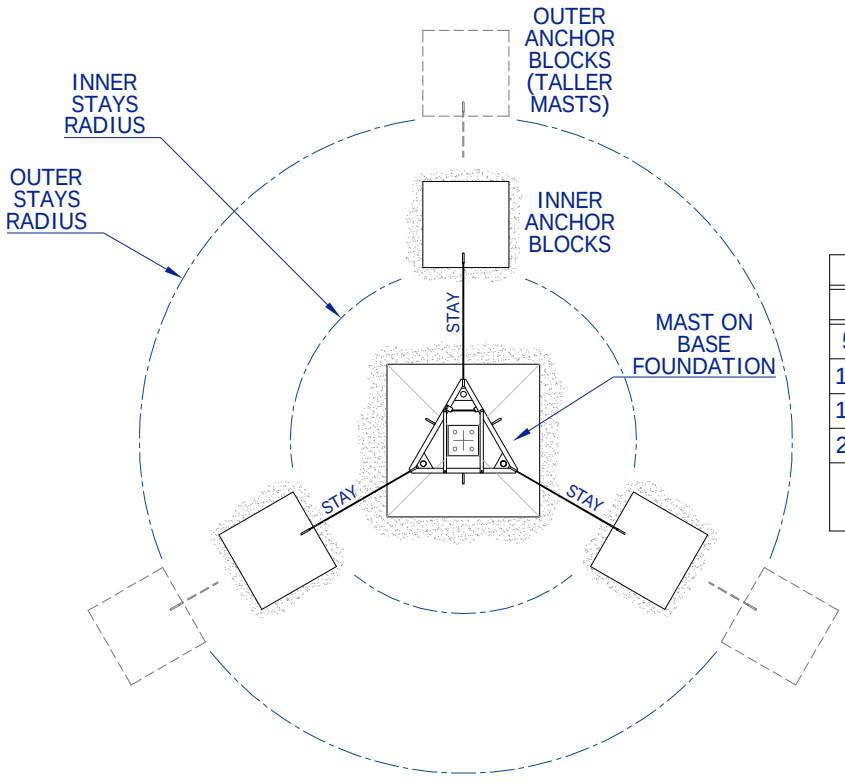
STAY PANEL WITH ANTI-TWIST
CAN BE SUPPLIED WHERE REQUIRED







TYPICAL REST PLATFORM ARRANGEMENTS



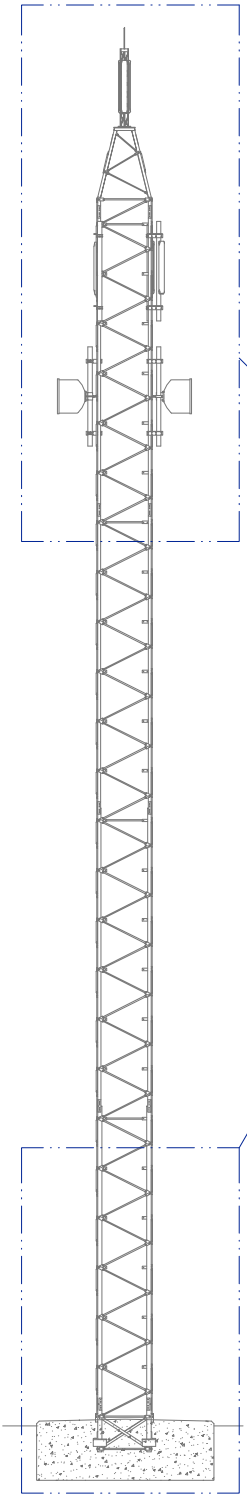
EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADIUS
50m MAST	40m	--
100m MAST	30m	70m
150m MAST	50m	110m
200m MAST	100m	150m
Please Note; these figures are given as a rough guide only		

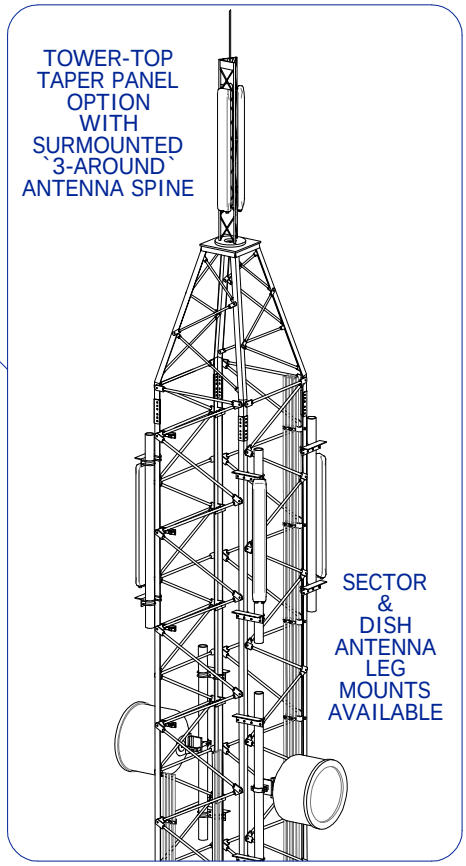
PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

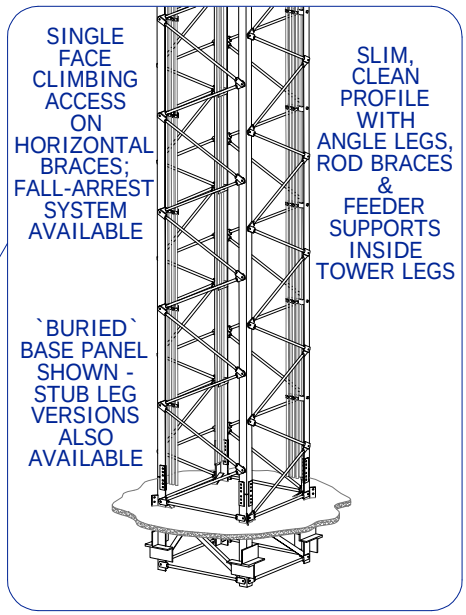
Datasheet Number SDS_1050_001 Rev.B

STRUCTURES DATASHEET

AD1080 TOWER - Product Overview







STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	SQUARE
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	40m
FACEWIDTH	1080mm
SITESHARE OPTION	YES
ACCESS CONFIGURATION	HORIZONTAL BRACING RUNGS
LEG SECTION	ANGLE
BRACE SECTION	ROD
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
TYPICAL LOADING	3 or 6 x GSM, 2 or 4 x ø0.6m DISH
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Low visual impact due to slim, clean profile

High windspeed/loading ratio

Accessible feeder cable positions

Can be `flat-packed` to compact form for easy transit and storage

Quick to erect due to simple construction which utilises many similar components

Integral climbing rungs to one tower face

PRODUCT DESCRIPTION

The AD1080 is a low-profile square lattice tower developed primarily as a low visual impact solution for the worldwide cellular market.

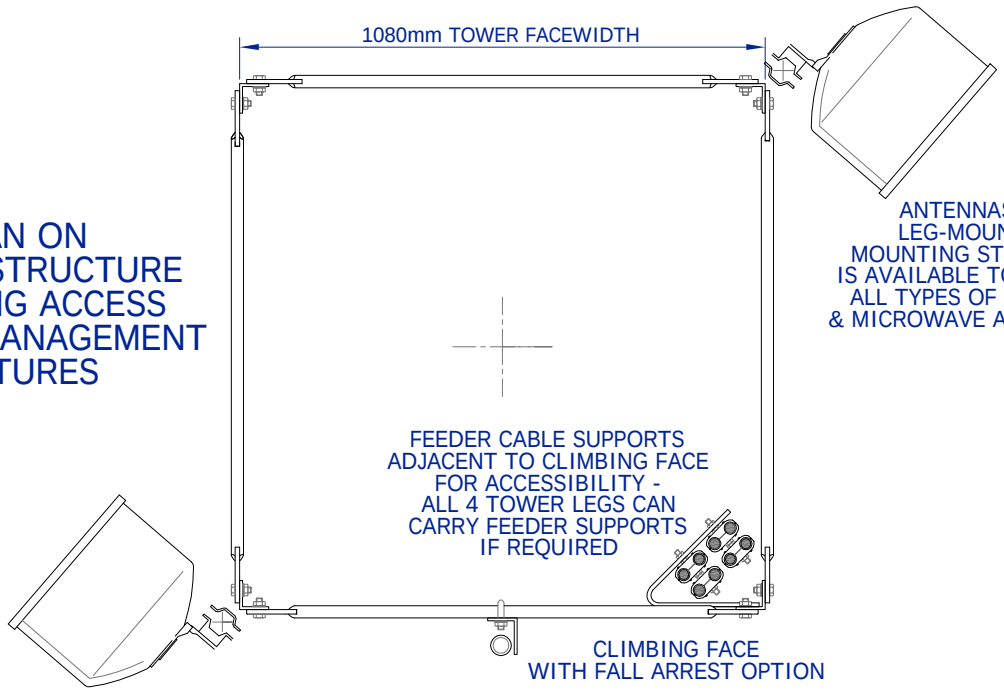
Ideally suited to carry Cross-Polar Antennas, headloading is reduced. This in turn facilitates the tower`s slim profile.
Furthermore, the AD1080 is designed to deflection criteria suitable for microwave links.
The structure is fully galvanised, and panel modules are available at 2.5m, 3m, 4m, or 6m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.
The AD1080 has proved to be popular with planning authorities, and continues to be employed on a widespread basis by worldwide cellular networks.

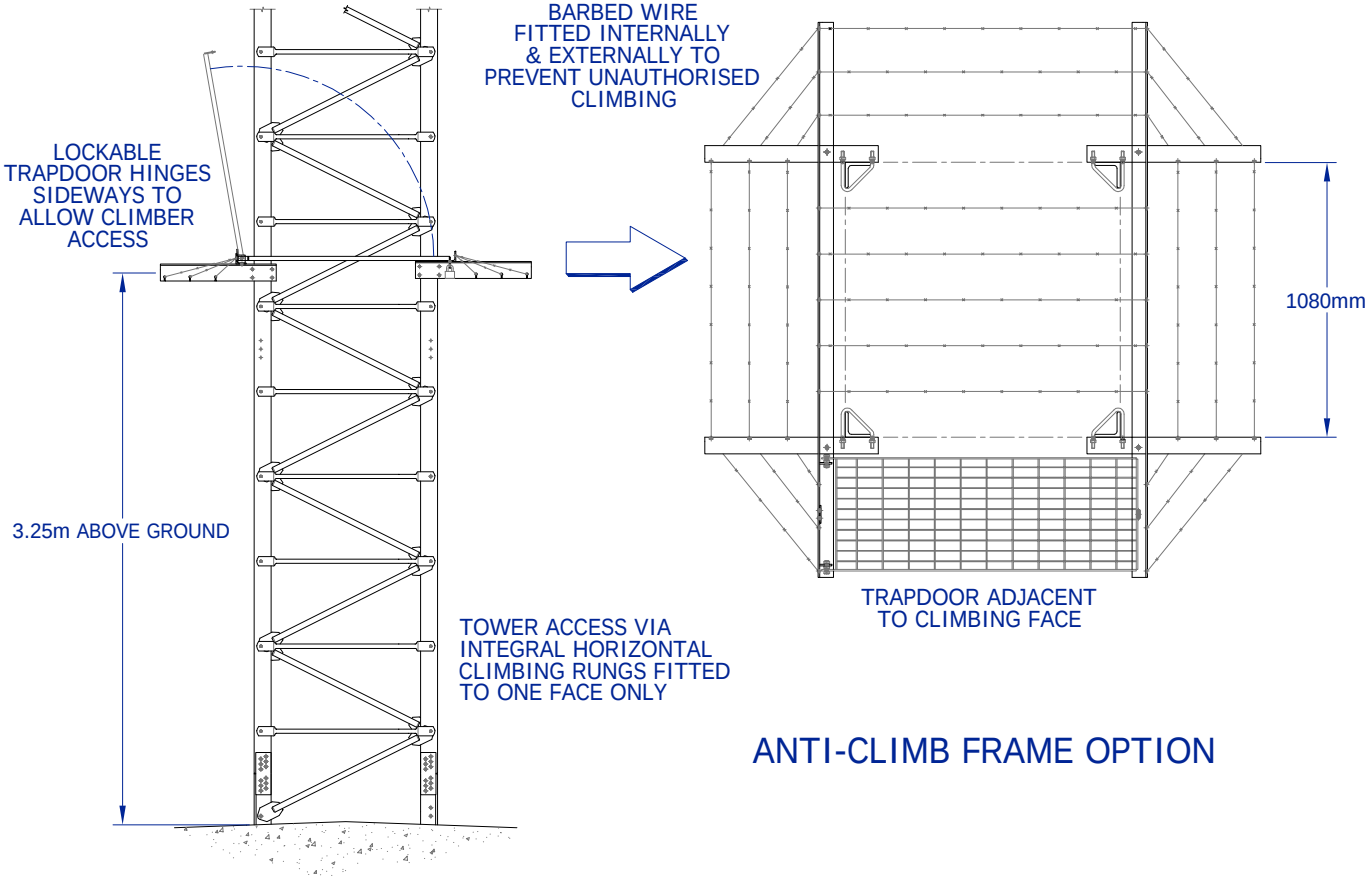
Datasheet Number SDS_1080_001 Rev.A

STRUCTURES DATASHEET

AD1080 TOWER - Features

PLAN ON AD1080 STRUCTURE SHOWING ACCESS & CABLE MANAGEMENT FEATURES



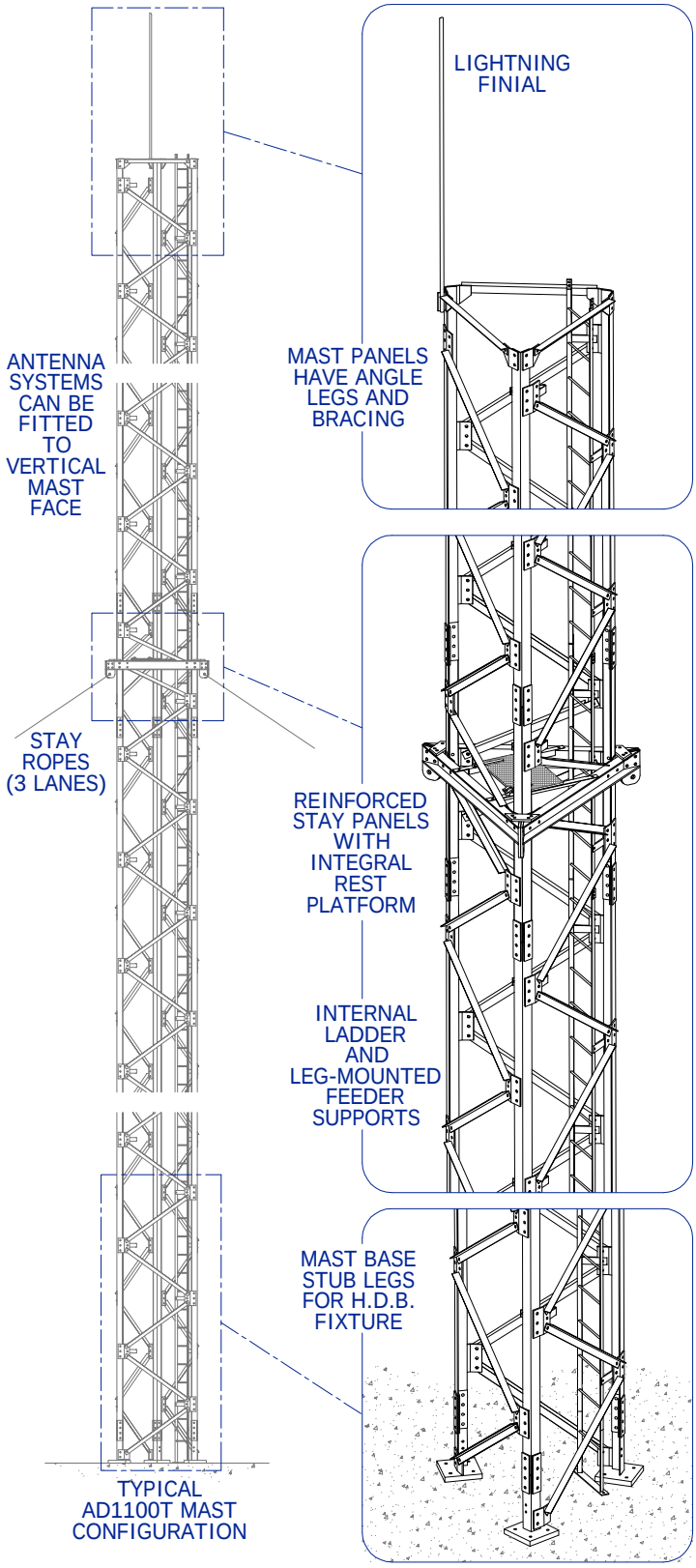


ANTI-CLIMB FRAME OPTION

Datasheet Number SDS_1080_001 Rev.A

STRUCTURES DATASHEET

AD1100T MAST - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	BROADCAST / CELLULAR
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	200m
FACEWIDTH	1100mm
PLATFORM SPACING	AT STAY LEVELS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	SS400 & SS540
TYPICAL LOADING	LIGHT/MEDIUM BROADCAST, MEDIUM CELLULAR
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Lightweight and quick to erect

Cost-effective all-angle construction

High capacity, with easily accessible feeder cable management

Slim profile giving good wind efficiency

Suitable for installation in remote areas

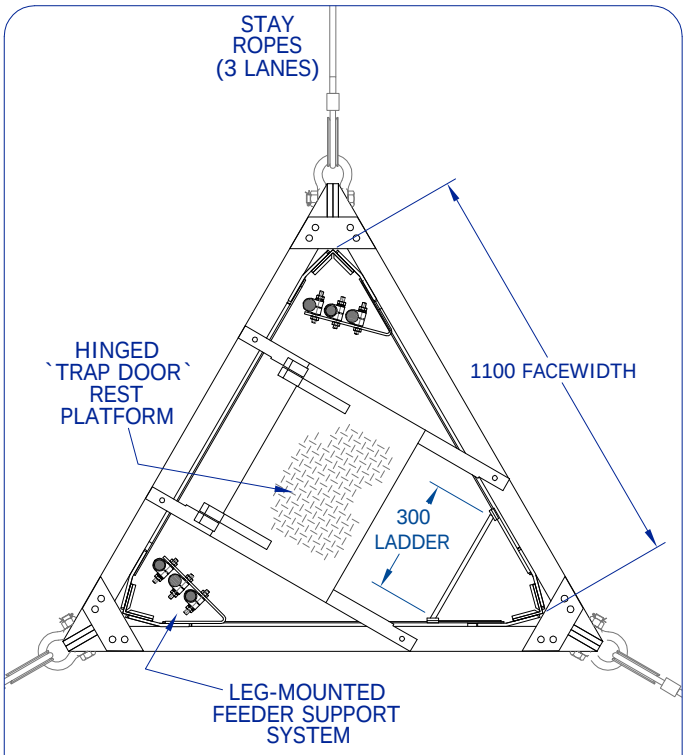
Datasheet Number SDS_1100T_001 Rev.C

PRODUCT DESCRIPTION

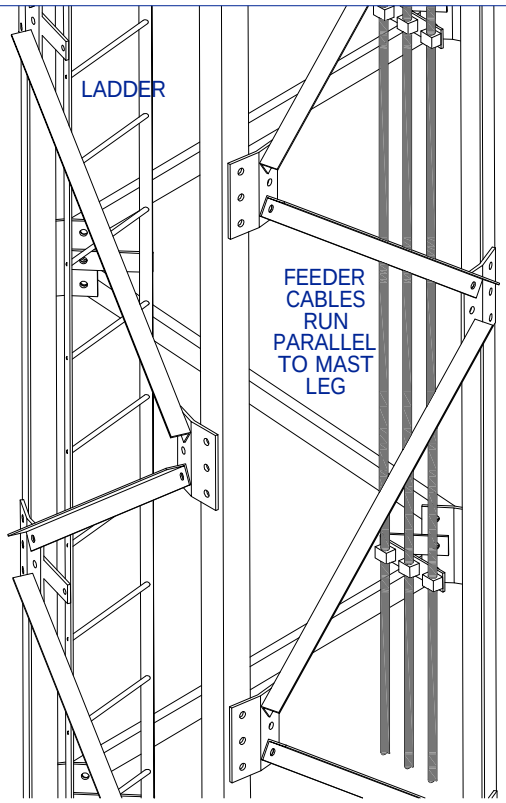
Designed primarily as a multi-user mast, the AD1100T is very light for its` loading capacity, and capable of being easily upgraded for heavier loads. The design of the AD1100T will accommodate substitution of member sizes to suit steel availability and design upgrades.
The angle and plate construction of this mast makes it quick and economical to fabricate. In addition to this, the structure is lightweight, making it suitable for deployment in remote areas where transport of structure and equipment is difficult.

STRUCTURES DATASHEET

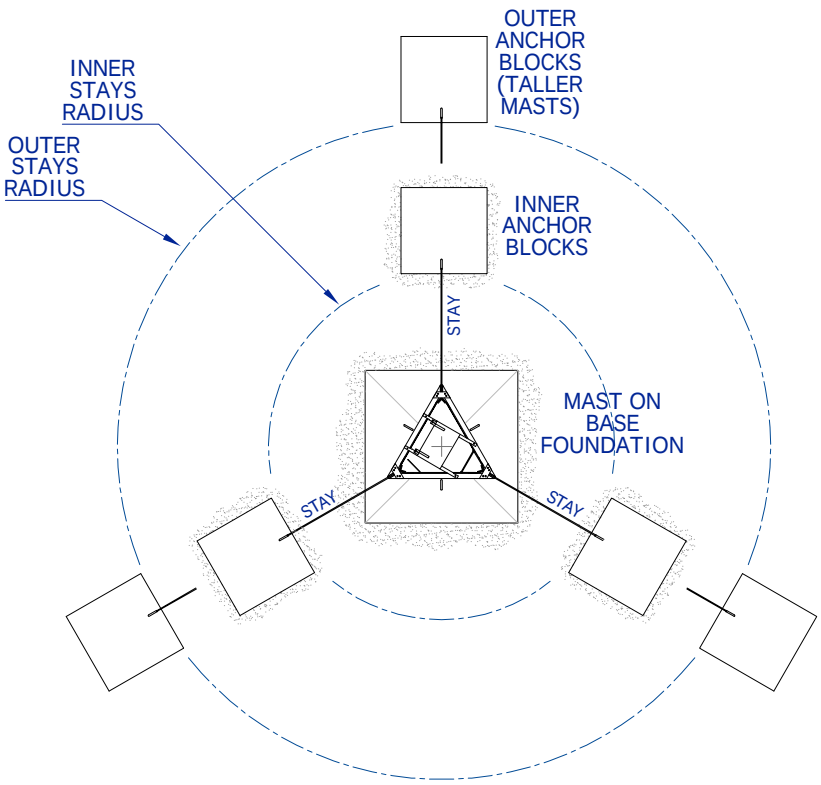
AD1100T MAST - Features



PLAN ON STAY PANEL WITH INTEGRAL REST PLATFORM



MAST PANEL AND FEEDER CABLES



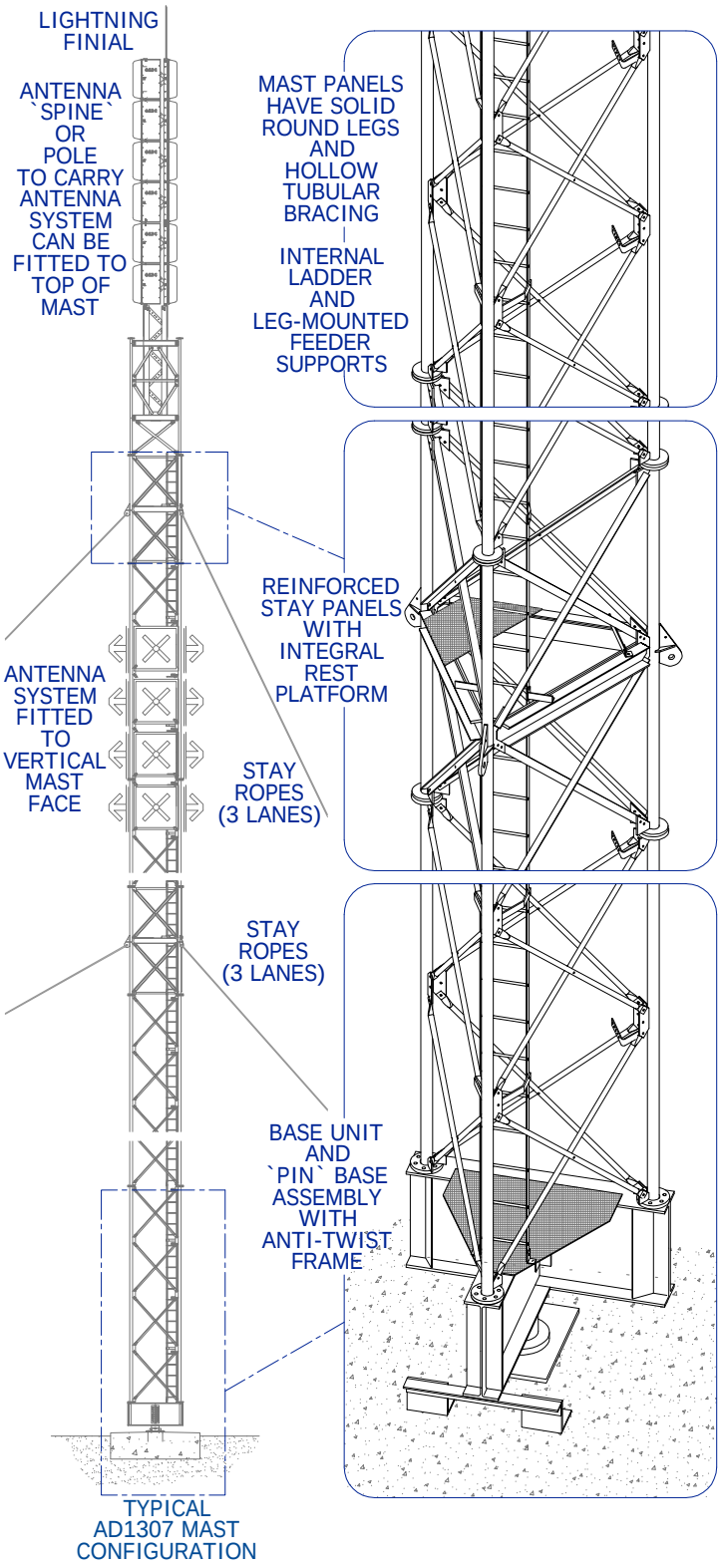
EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADII
60m MAST	40m	---
80m MAST	45m	---
120m MAST	45m	70m
150m MAST	50m	110m
Please Note; these figures are given as a rough guide only		

PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

Datasheet Number SDS_1100T_001 Rev.C

STRUCTURES DATASHEET

AD1307 MAST - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	BROADCAST
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	250m
FACEWIDTH	1300mm
PLATFORM SPACING	KITS AVAILABLE TO FIT AT MANY LEVELS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	SOLID ROUND
BRACE SECTION	TUBE
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	UHF (SPINE MOUNTED), VHF APERTURE, AM/FM APERTURE
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

- Wind-efficient design provides a slim profile
- Quick to erect using an AlanDick derrick system
- Easy to maintain
- High loading to size ratio
- Can be adapted as a mast radiator

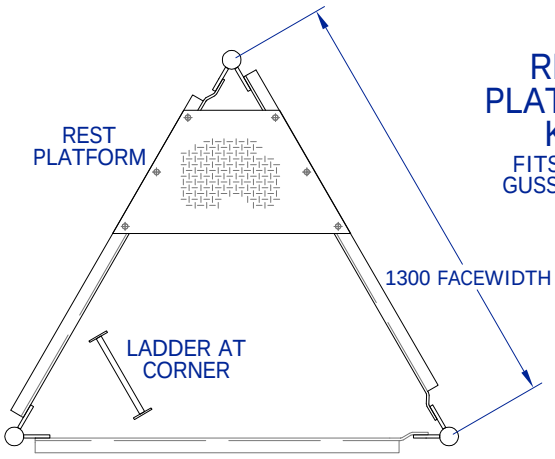
PRODUCT DESCRIPTION

The AD1307 mast has been designed specifically as a quick-to-erect structure capable of supporting VHF/UHF and AM/FM antenna arrays and equipment at heights of up to 250m.
This product is fully galvanised, including the internal surfaces of its members, and its simple construction using solid round legs is easy and safe to maintain.
AD1307 masts are employed as traditional broadcast structures, and as mast radiators by operators worldwide.

Datasheet Number SDS_1307_001 Rev.B

STRUCTURES DATASHEET

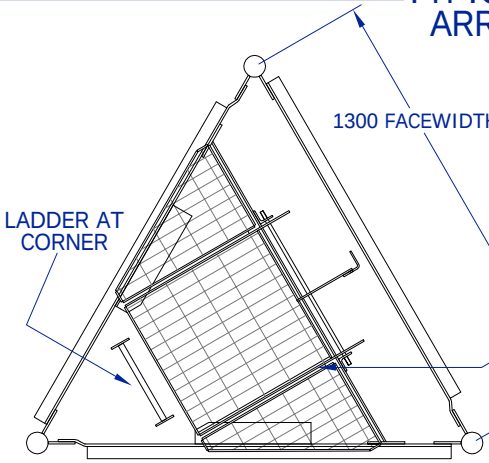
AD1307 MAST - Features



REST PLATFORM KIT

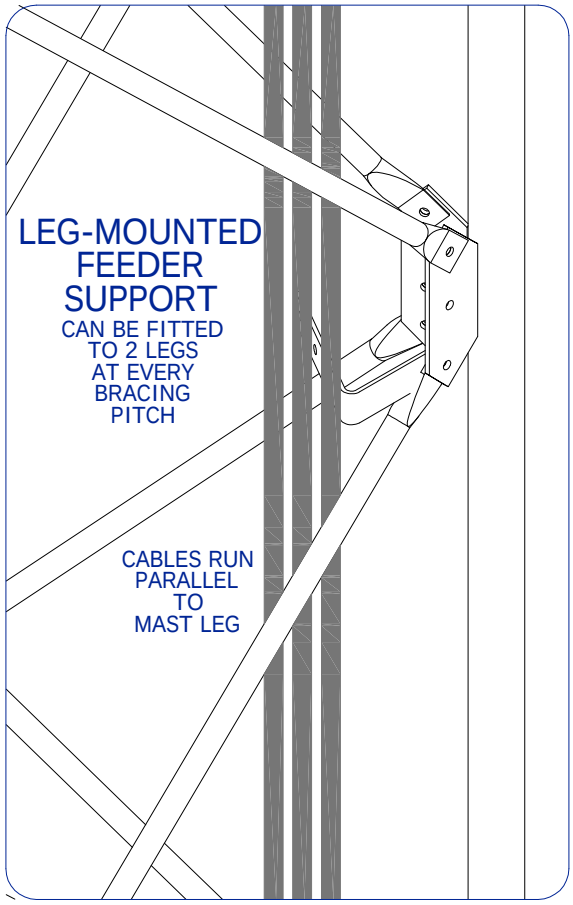
FITS AT ANY GUSSET LEVEL

TYPICAL PLATFORM ARRANGEMENTS



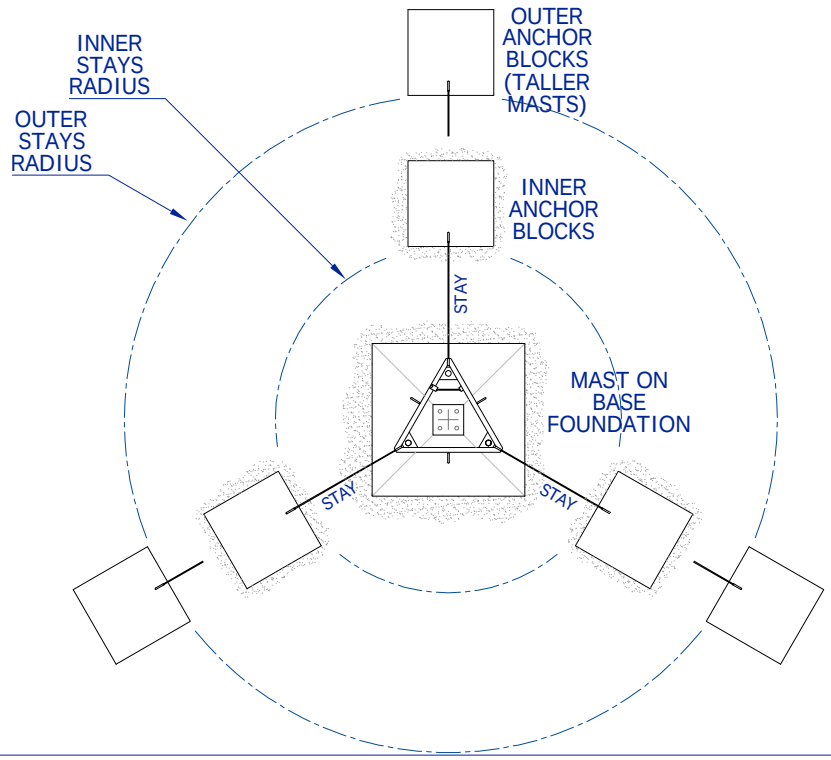
WORK PLATFORM KIT

FITS AT ANY GUSSET LEVEL



LEG-MOUNTED FEEDER SUPPORT

CAN BE FITTED TO 2 LEGS AT EVERY BRACING PITCH



EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADII
50m MAST	40m	--
100m MAST	40m	80m
150m MAST	50m	110m
200m MAST	40m	100m & 150m
250m MAST	50m	110m & 160m

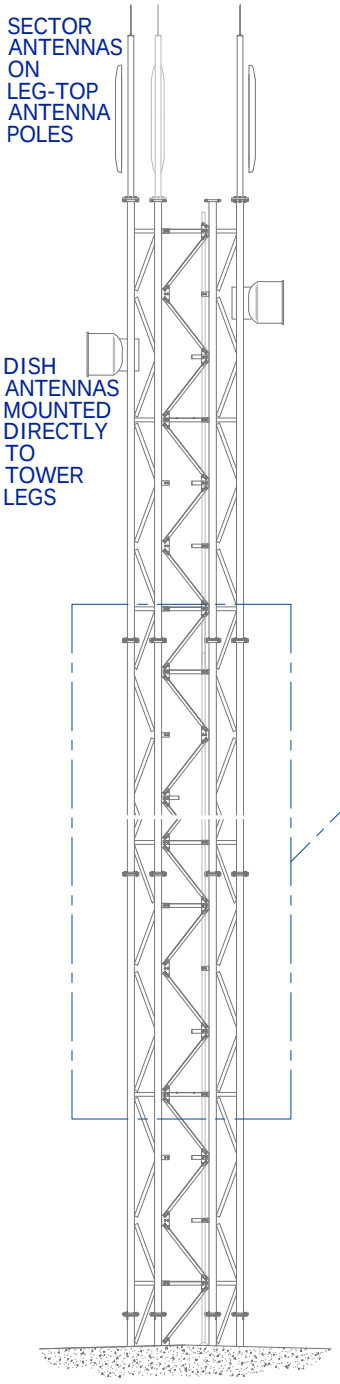
Please Note; these figures are given as a rough guide only

PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

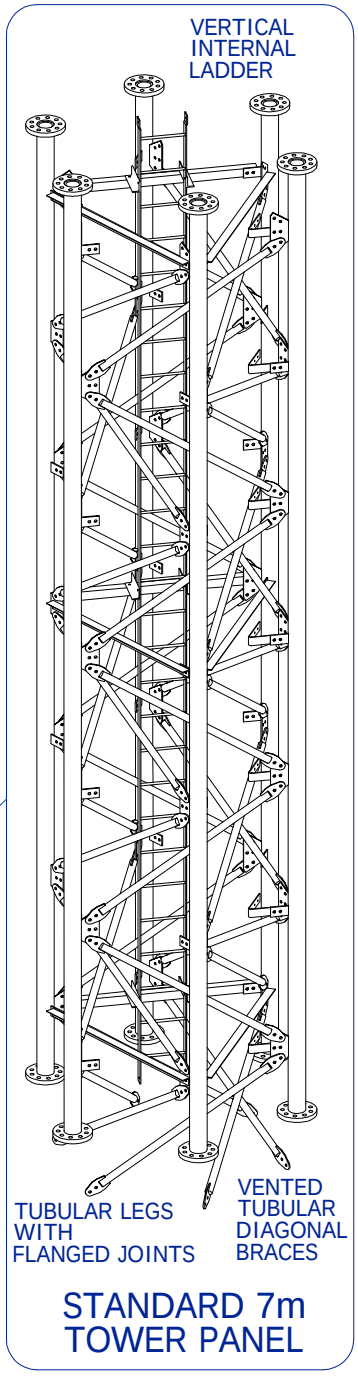
Datasheet Number SDS_1307_001 Rev.B

STRUCTURES DATASHEET

AD1506 TOWER - Product Overview



AD1506 TOWER



STANDARD 7m TOWER PANEL

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR / MICROWAVE
PLAN SHAPE	INTERLEAVED (HEXAGONAL/STAR)
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	35m
FACEWIDTH	1500mm
PLATFORM SPACING	CUSTOMER OPTION
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	TUBE
BRACE SECTION	TUBE and ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	MULTI-USER CELLULAR, MULTI-USER MICROWAVE
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Aesthetic Dual-Purpose structure - Ideal for switch sites or cellular siteshare applications

Favoured by planning authorities, as the 6-legged configuration facilitates a slim profile in relation to tower height.

High loading capacity for size

Tubular legs facilitate direct mounting of dishes - No specialised mounting steelwork required

PRODUCT DESCRIPTION

The AD1506 is a 6-legged structure designed primarily as a switch tower. However, it is equally suitable for utilisation as a siteshare tower for cellular applications.
Tubular legs provide facility for mounting dishes directly, without requirement for traditional mounting poles and brackets. The tower legs provide suitable clearance to allow many loading configurations.
The structure is fully galvanised, including the internal surfaces of its tubular members. Standard panel modules are 7m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and alternative mounts for all types of cellular antennas.

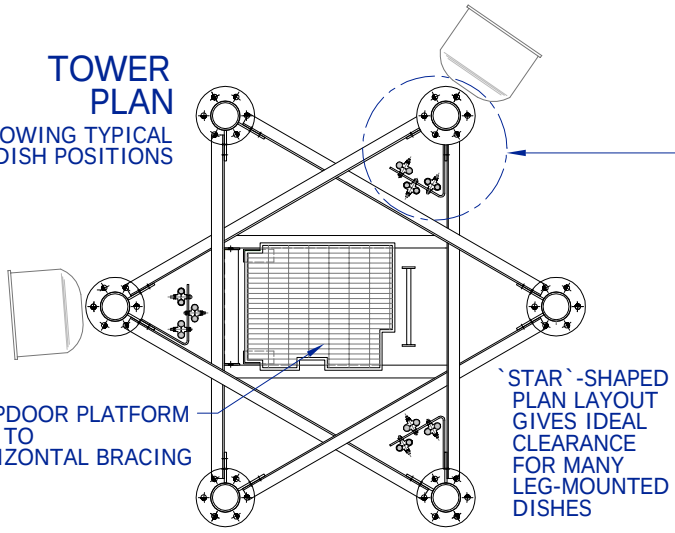
Datasheet Number SDS_1506_001 Rev.B

STRUCTURES DATASHEET

AD1506 TOWER - Features

TOWER PLAN

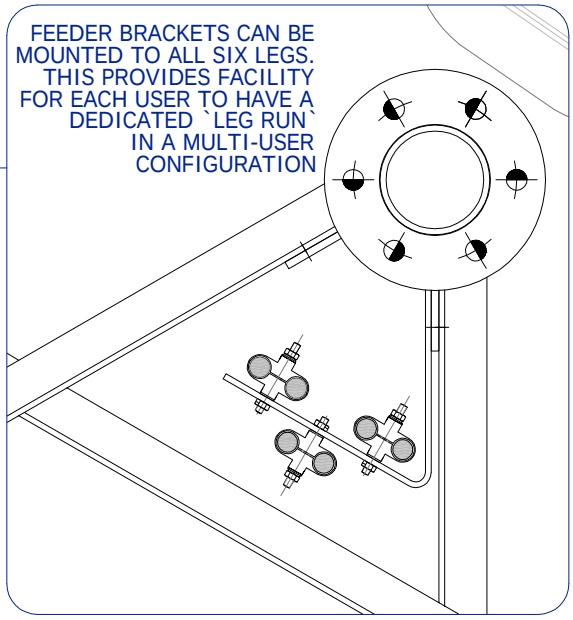
SHOWING TYPICAL DISH POSITIONS



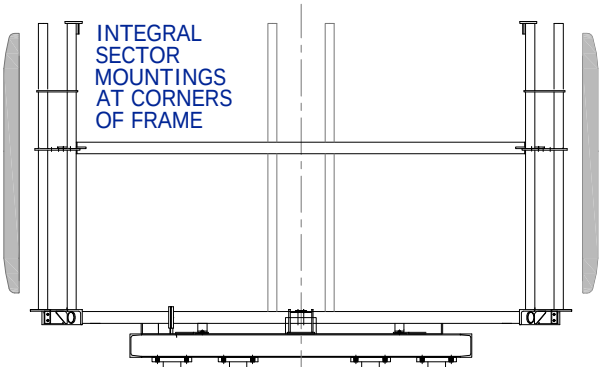
TRAPDOOR PLATFORM FITS TO HORIZONTAL BRACING

`STAR`-SHAPED PLAN LAYOUT GIVES IDEAL CLEARANCE FOR MANY LEG-MOUNTED DISHES

FEEDER BRACKETS CAN BE MOUNTED TO ALL SIX LEGS. THIS PROVIDES FACILITY FOR EACH USER TO HAVE A DEDICATED `LEG RUN` IN A MULTI-USER CONFIGURATION

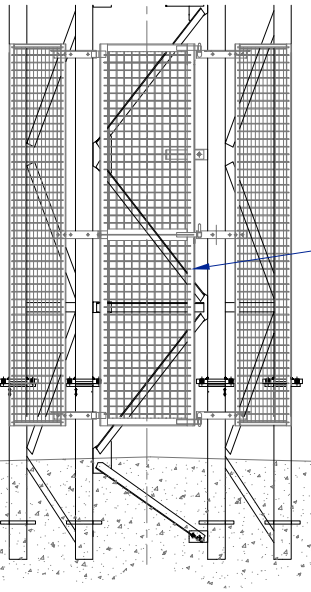


INTEGRAL SECTOR MOUNTINGS AT CORNERS OF FRAME



ANTENNA DELTA FRAME OPTION

CAN BE FITTED AT TOWER TOP AS SHOWN, OR OTHER HEIGHT



LOCKABLE ANTI-CLIMB SCREEN OPTION

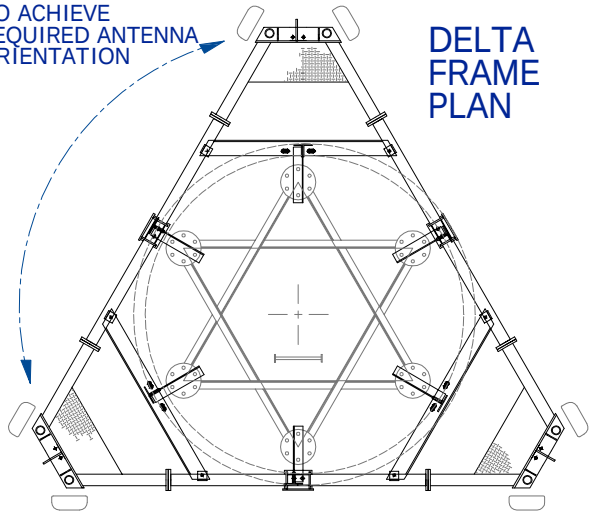
ANTI-VANDAL SURROUND WITH BARBED WIRE ALSO AVAILABLE

HINGED ACCESS DOOR IN ANTI-CLIMB SCREEN

LEG STUBS CAST INTO FOUNDATION

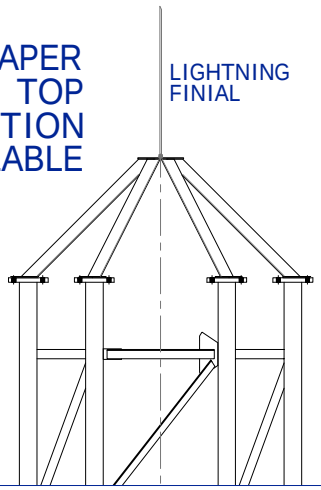
DELTA FRAME CAN BE ROTATED TO ACHIEVE REQUIRED ANTENNA ORIENTATION

DELTA FRAME PLAN



TAPER TOP OPTION AVAILABLE

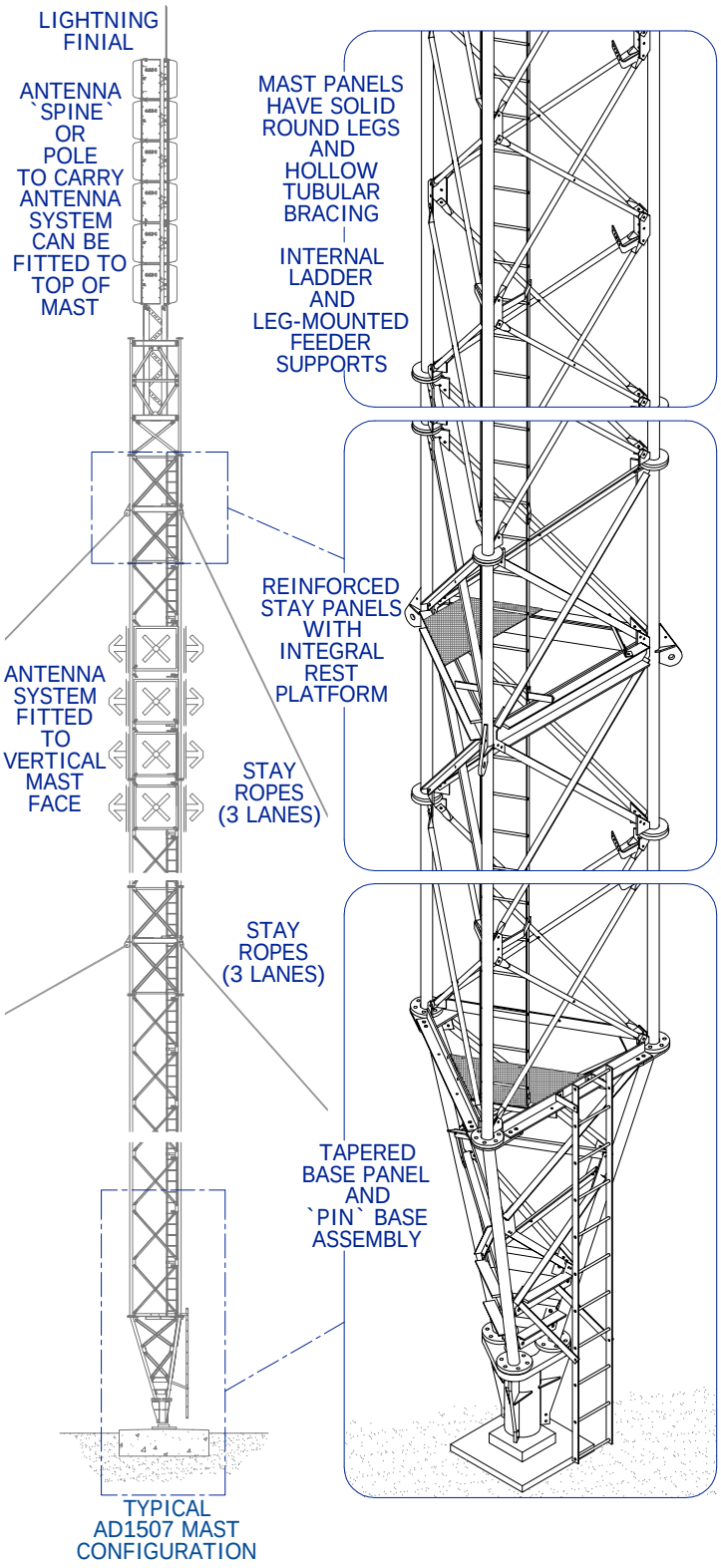
LIGHTNING FINIAL



Datasheet Number SDS_1506_001 Rev.B

STRUCTURES DATASHEET

AD1507 MAST - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MAST
MAIN APPLICATION	BROADCAST
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	300m
FACEWIDTH	1500mm
PLATFORM SPACING	KITS AVAILABLE TO FIT AT MANY LEVELS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	SOLID ROUND
BRACE SECTION	TUBE
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	UHF (SPINE MOUNTED), VHF APERTURE, AM/FM APERTURE
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

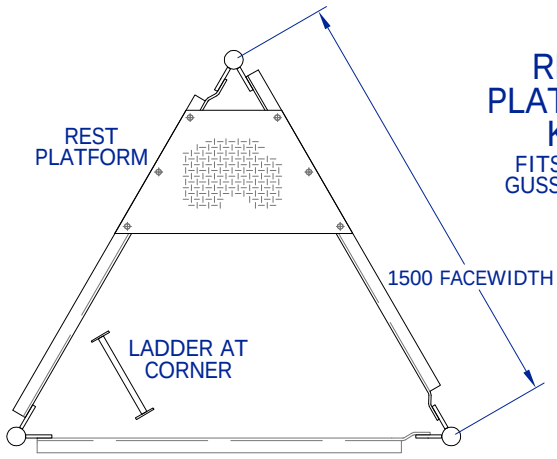
- Wind-efficient design provides a slim profile
- Quick to erect using an AlanDick derrick system
- Easy to maintain
- High loading to size ratio
- Can be adapted as a mast radiator

PRODUCT DESCRIPTION

The AD1507 mast has been designed specifically as a quick-to-erect structure capable of supporting VHF/UHF and AM/FM antenna arrays and equipment at heights of up to 300m.
This product is fully galvanised, including the internal surfaces of its members, and its simple construction using solid round legs is easy and safe to maintain.
AD1507 masts are employed as traditional broadcast structures, and as mast radiators by operators worldwide.

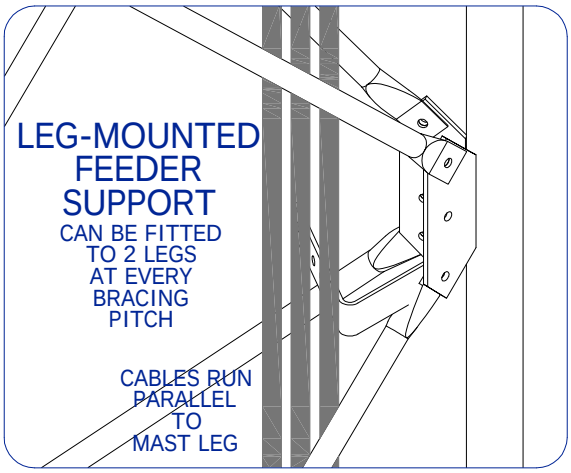
STRUCTURES DATASHEET

AD1507 MAST - Features



REST PLATFORM KIT

FITS AT ANY GUSSET LEVEL

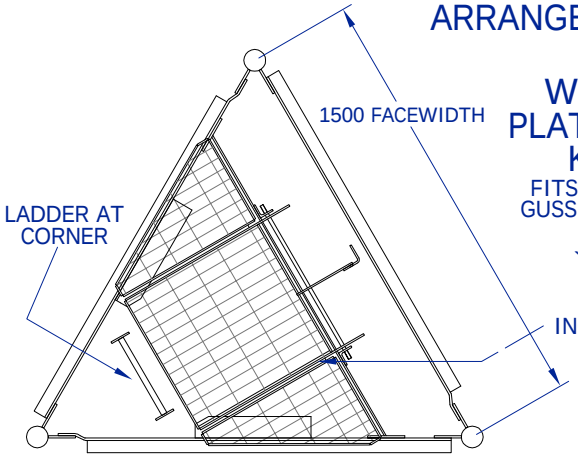


LEG-MOUNTED FEEDER SUPPORT

CAN BE FITTED TO 2 LEGS AT EVERY BRACING PITCH

CABLES RUN PARALLEL TO MAST LEG

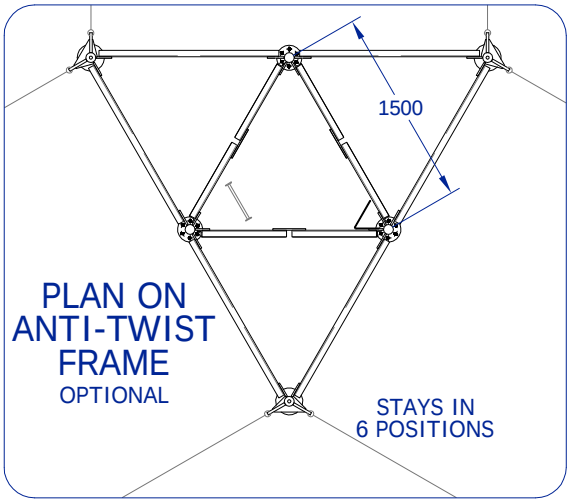
TYPICAL PLATFORM ARRANGEMENTS



WORK PLATFORM KIT

FITS AT ANY GUSSET LEVEL

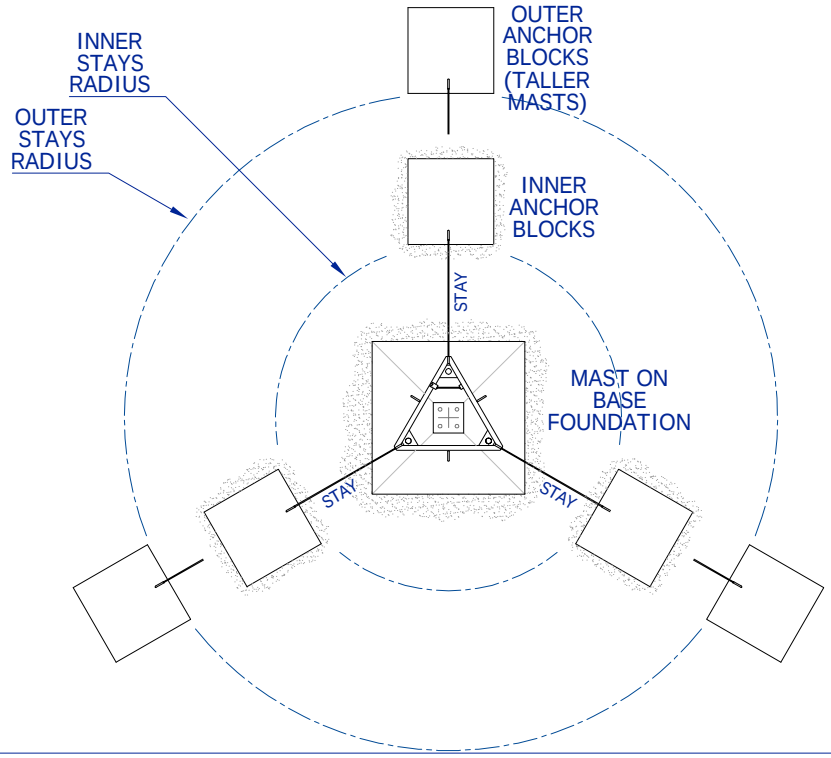
`OPEN-GRID` WORK PLATFORM INC. TRAP DOOR ASSEMBLY



PLAN ON ANTI-TWIST FRAME

OPTIONAL

STAYS IN 6 POSITIONS

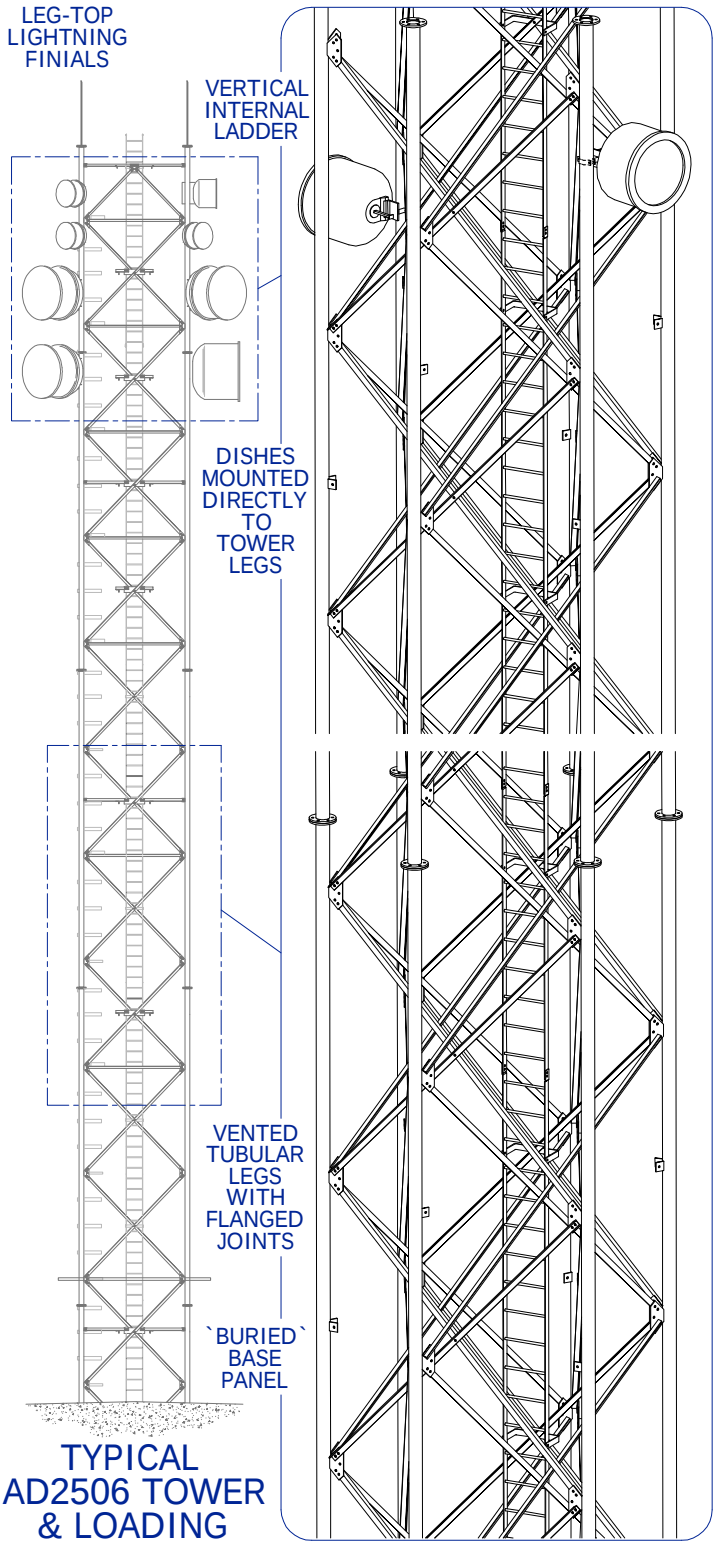


EXAMPLE STAY RADII		
HEIGHT	INNER RADIUS	OUTER RADII
100m MAST	30m	70m
150m MAST	60m	120m
200m MAST	75m	150m
300m MAST	60m	150m & 240m
Please Note; these figures are given as a rough guide only		

PLAN LAYOUT OF TYPICAL MAST STAY LANE ARRANGEMENT - STAYS AT 120° SPACING

STRUCTURES DATASHEET

AD2506 TOWER - Product Overview



TYPICAL AD2506 TOWER & LOADING

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	HEAVY MICROWAVE
PLAN SHAPE	INTERLEAVED (HEXAGONAL/STAR)
ELEVATION SHAPE	PARALLEL
MAXIMUM BUILD HEIGHT	60m
FACEWIDTH	2500mm
PLATFORM SPACING	CUSTOMER OPTION
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	TUBE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	HEAVY MICROWAVE SWITCH
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Aesthetic Dual-Purpose structure - Ideal for switch sites or cellular siteshare applications

Favoured by planning authorities, as the 6-legged configuration facilitates a slim profile in relation to tower height and load capacity.

High loading capacity for size

Tubular legs facilitate direct mounting of dishes - No specialised mounting steelwork required

PRODUCT DESCRIPTION

The AD2506 is a 6-legged structure designed primarily as a switch tower, but is equally suitable for utilisation as a siteshare tower for cellular applications; High loading configurations in relation to tower size can be achieved in both applications.
Tubular legs provide facility for mounting dishes directly, without requirement for traditional mounting poles and brackets. The tower legs provide suitable clearance to allow many loading configurations.
The structure is fully galvanised, including the internal surfaces of its tubular members. Standard panel modules are 7.5m, 5.5m & 3.75m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems, additional feeder supports and alternative mounts for all types of cellular antennas.

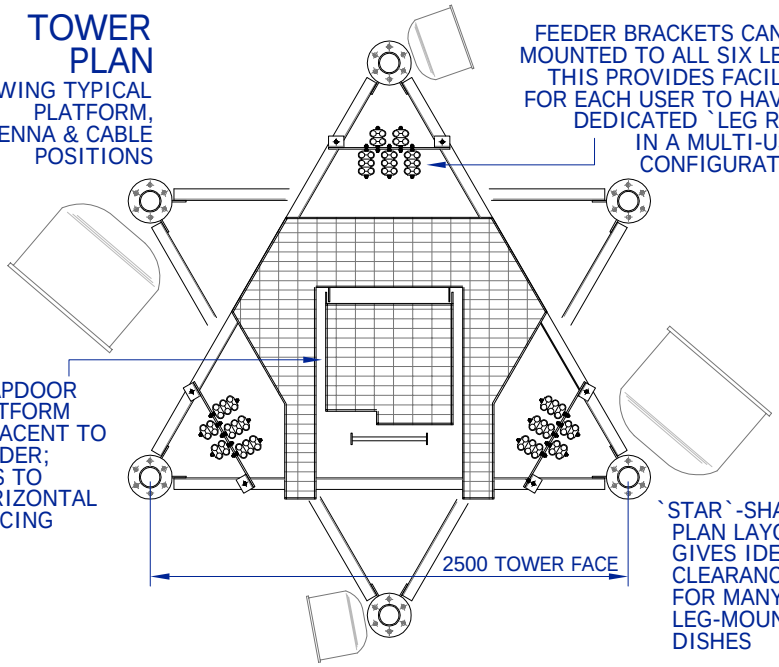
Datasheet Number SDS_2506_001 Rev.A

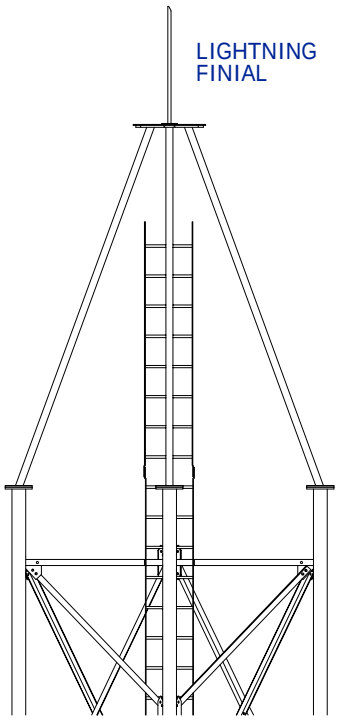
STRUCTURES DATASHEET

AD2506 TOWER - Features

TOWER PLAN

SHOWING TYPICAL PLATFORM, ANTENNA & CABLE POSITIONS

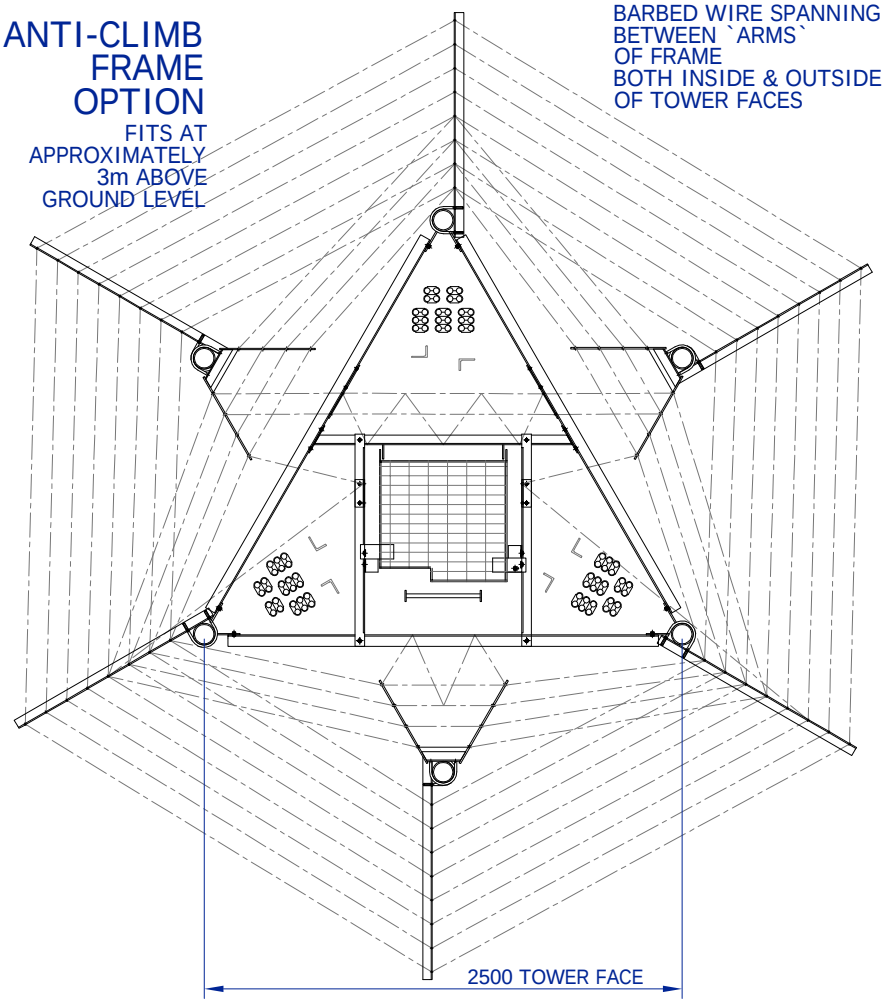


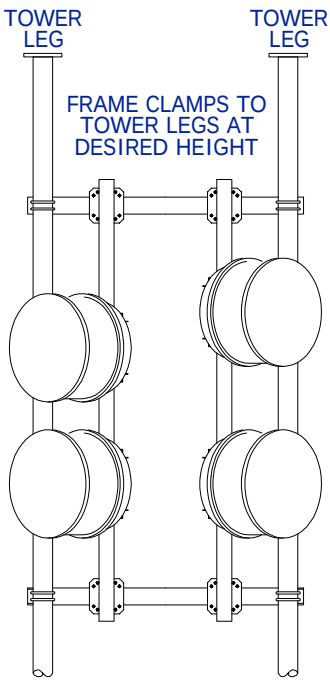


TAPER TOP OPTION FOR AD2506 TOWER

ANTI-CLIMB FRAME OPTION

FITS AT APPROXIMATELY 3m ABOVE GROUND LEVEL





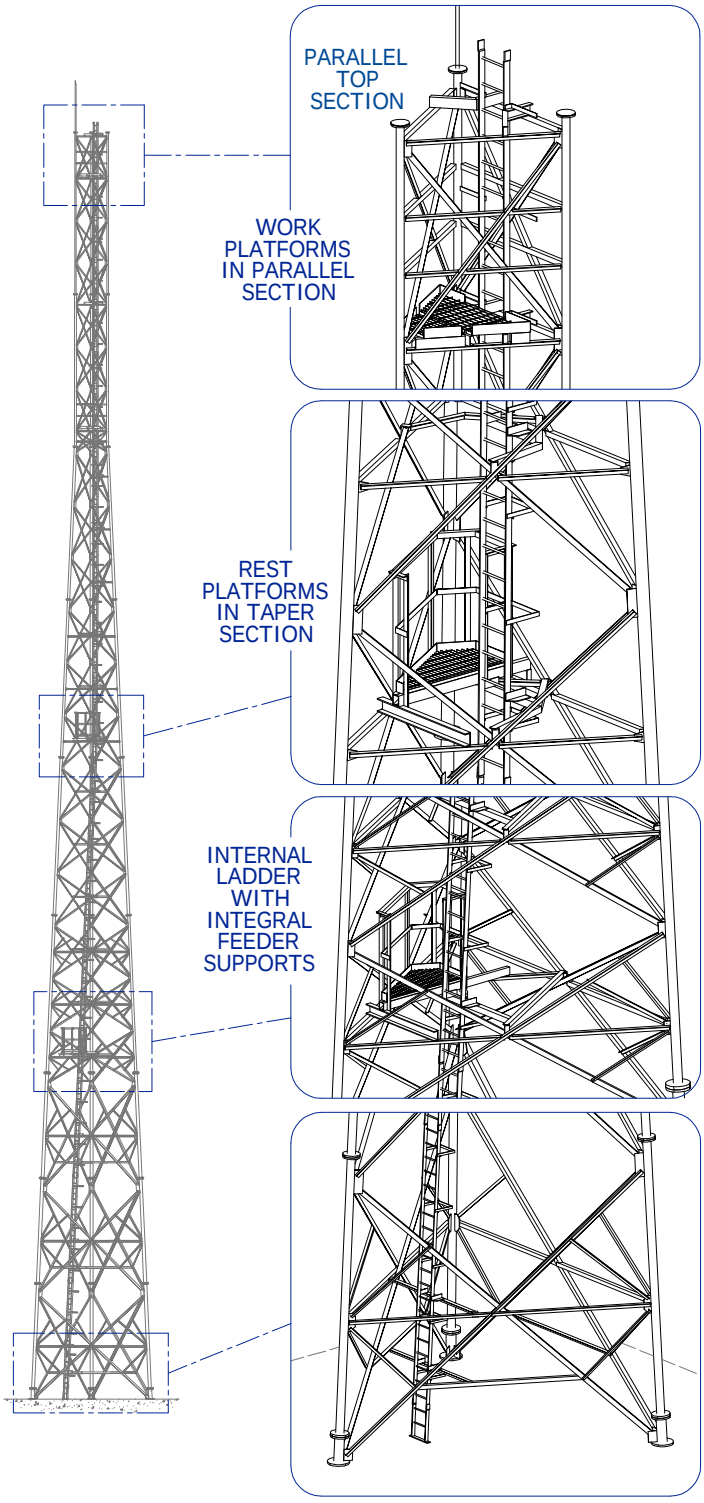
FACE FRAME ANTENNA MOUNT OPTION

ALLOWS EVEN GREATER ANTENNA MOUNTING CAPACITY

Datasheet Number SDS_2506_001 Rev.A

STRUCTURES DATASHEET

AD3001 TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR, BROADCAST, MICROWAVE
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	TAPERED (WITH PARALLEL TOP)
MAXIMUM BUILD HEIGHT	250m (60m TOWER SHOWN)
FACEWIDTH	TOP = 1527mm, BASE = 23600mm (250m TOWER)
PLATFORM SPACING	VARIABLE
ACCESS CONFIGURATION	INTERNAL LADDER / SPINE
LEG SECTION	TUBE
BRACE SECTION	ANGLE or TUBE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
TYPICAL LOADING	LIGHT BROADCAST MULTI-USER CELLULAR MULTI-USER MICROWAVE
UTILISED DESIGN CODES	CP3/BS.449, BS.8100, EIA222F & OTHERS
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Low-Weight General Purpose Tower

Open structural form gives low wind resistance

Maximum leg lengths of 5m & 7.5m facilitate ease of transport

Central feeder spine available for structures over 60m high

Integral Derrick fixing points at designated positions

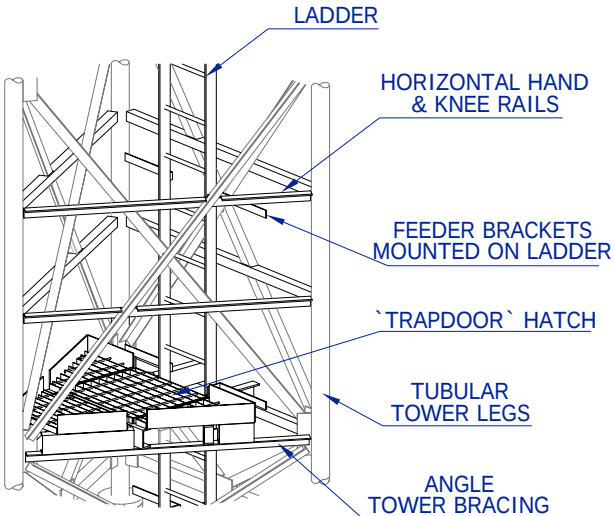
PRODUCT DESCRIPTION

The AD3001 is a wind-efficient, medium duty, tubular tower with a low visual impact.
Smaller variants of this structure as shown here have tubular legs and angle bracing. Feeder cable management in these cases is generally ladder-mounted.
Tall variants up to 250m feature tubular legs throughout, and also tubular bracing in the wider lower panels. A central parallel-side feeder spine is available for structures of this size, facilitating the handling of very large numbers of cables. Bolt-in climbing steps are provided on the legs of these all-tube panels as a rigging aid.
Higher loadings can be achieved if the tower top is truncated.

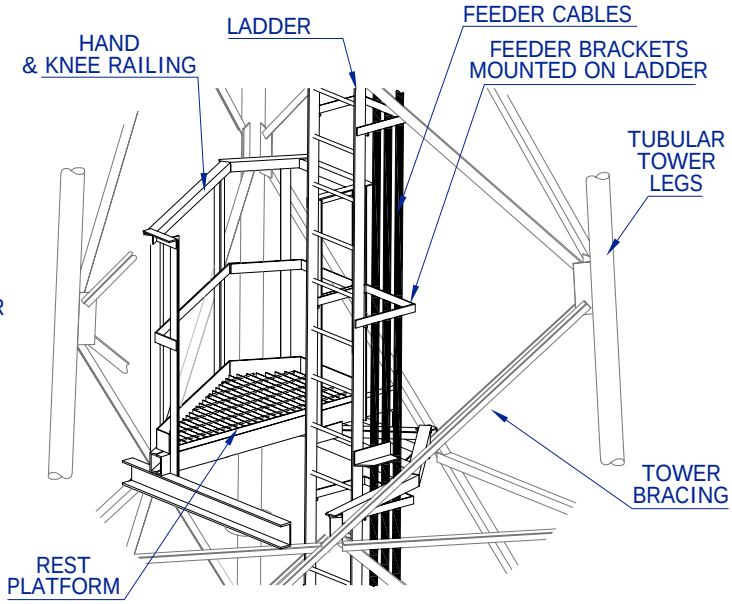
Datasheet Number SDS_3001_001 Rev.B

STRUCTURES DATASHEET

AD3001 TOWER - Features

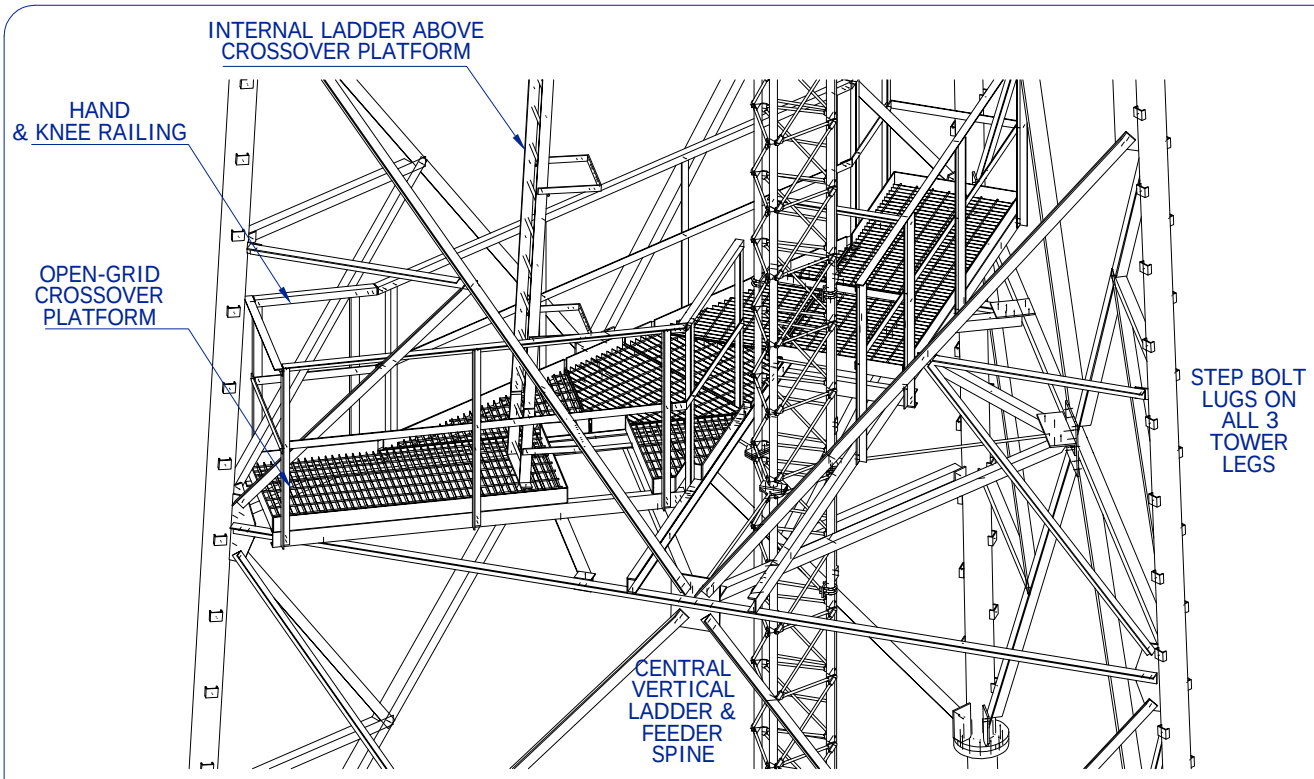


TYPICAL TRAPDOOR PLATFORM ARRANGEMENT IN TOWER PARALLEL SECTION



TYPICAL REST PLATFORM ARRANGEMENT IN TOWER TAPER SECTION - CAN BE DOUBLE-SIDED WITH TRAPDOOR TO GIVE GREATER WORK SPACE

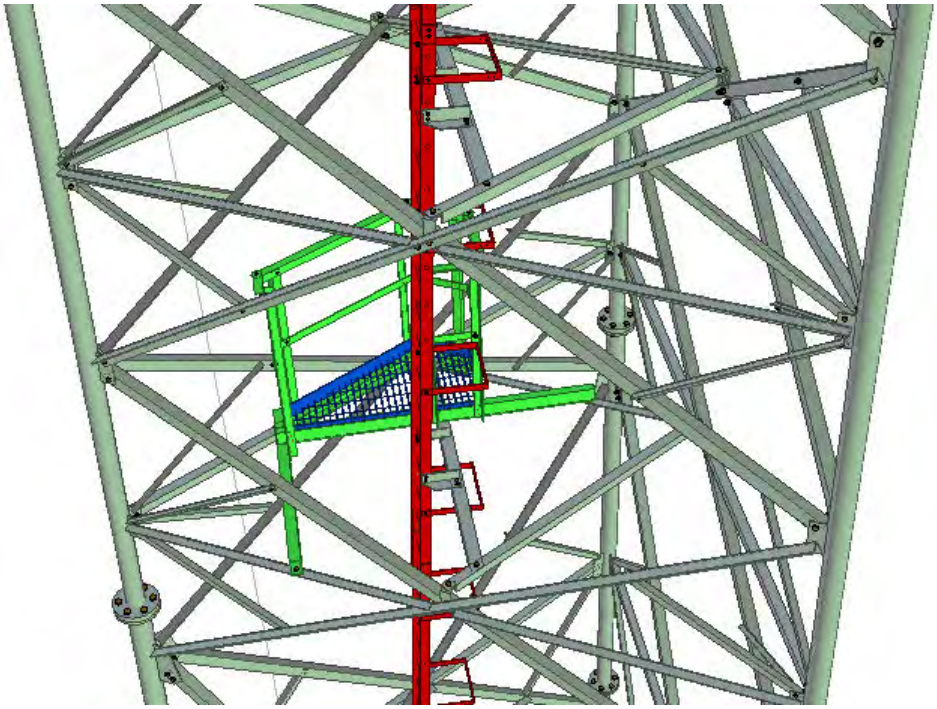
TOWER BRACING `CUT-AWAY` FOR CLARITY



TOWER PANEL WITH FEEDER SPINE & CROSSOVER PLATFORM TO CORNER LADDER (USED ON STRUCTURES OVER 60m HIGH)

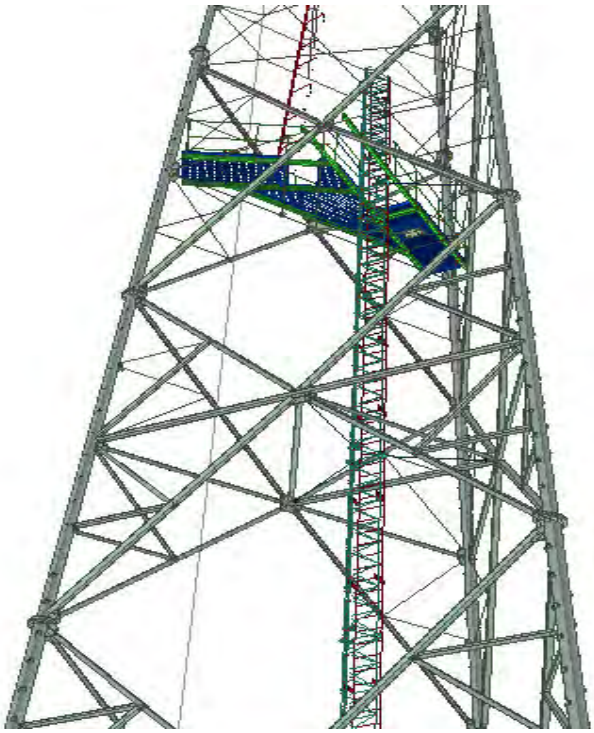
STRUCTURES DATASHEET

AD3001 TOWER - Visualisation



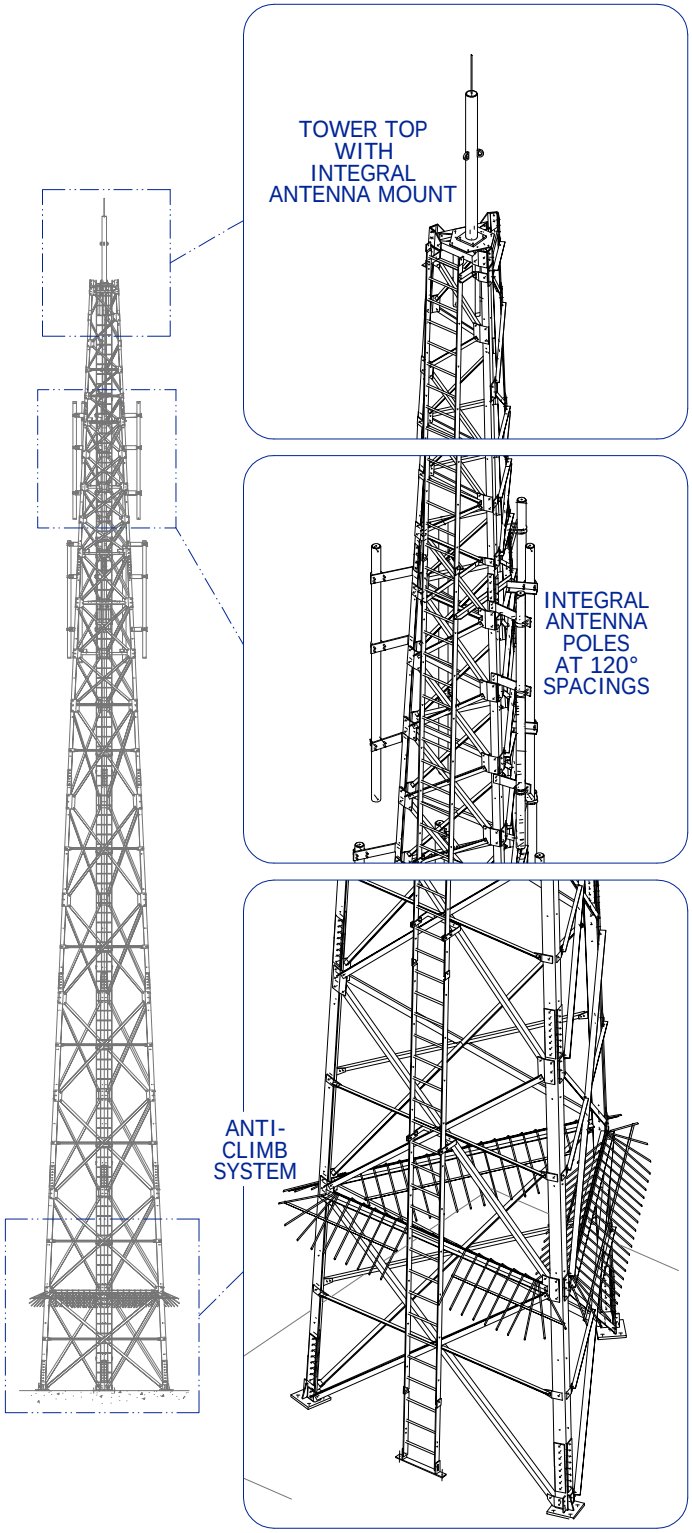
TYPICAL LADDER WITH
FEEDER SUPPORTS &
REST PLATFORM
IN TOWER
PARALLEL TOP SECTION

FEEDER SPINE
& CROSSOVER PLATFORM
TO CORNER LADDER
(USED ON STRUCTURES
OVER 60m HIGH)



STRUCTURES DATASHEET

AD3002 TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR / LIGHT MICROWAVE
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	TAPERED
MAXIMUM BUILD HEIGHT	50m
FACEWIDTH	TOP = 400mm, BASE = 4325mm
PLATFORM SPACING	AS REQUIRED
ACCESS CONFIGURATION	EXTERNAL FACE LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
TYPICAL LOADING	2 x (3 GSM & 2 DISHES)
UTILISED DESIGN CODES	BS.8100, CP3/BS.449
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

All angle construction

External (as shown) or internal ladder options available

Triangular profile

3-user option for low-windspeed areas

PRODUCT DESCRIPTION

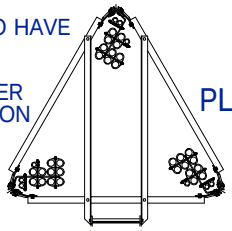
The AD3002 is an all-angle, low wind area, triangular tower primarily designed for medium duty cellular applications.
This is a cost-effective alternative to triangular towers with traditional tubular leg design.
Higher loadings can be achieved if the tower top is truncated.

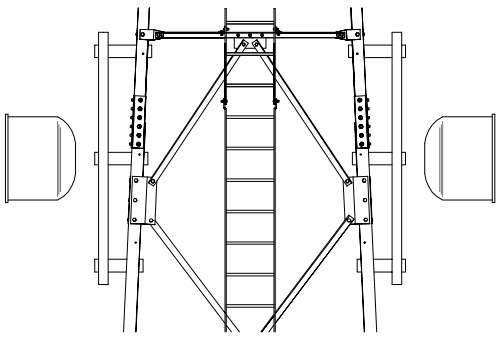
Datasheet Number SDS_3002_001 Rev.B

AD3002 TOWER - Features

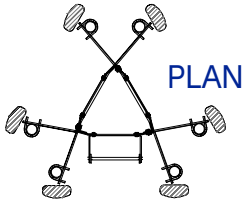
TYPICAL LOADING ARRANGEMENTS

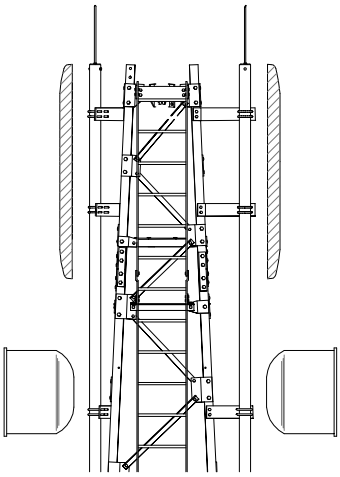
FEEDER BRACKETS MOUNTED FROM ALL THREE LEGS. THIS PROVIDES FACILITY FOR EACH USER TO HAVE A DEDICATED LEG RUN IN A TYPICAL 3-USER CONFIGURATION



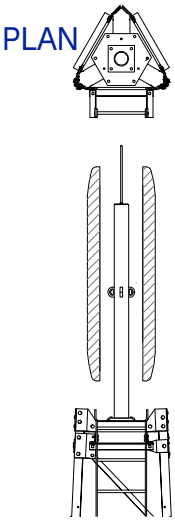


DISHES MOUNTED ON INTEGRAL ANTENNA POLES

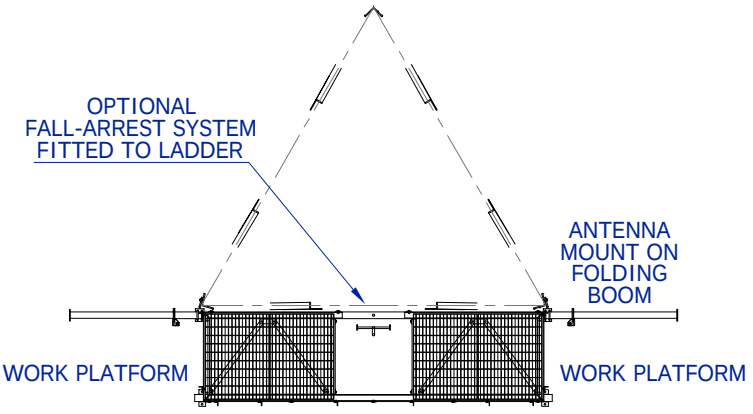




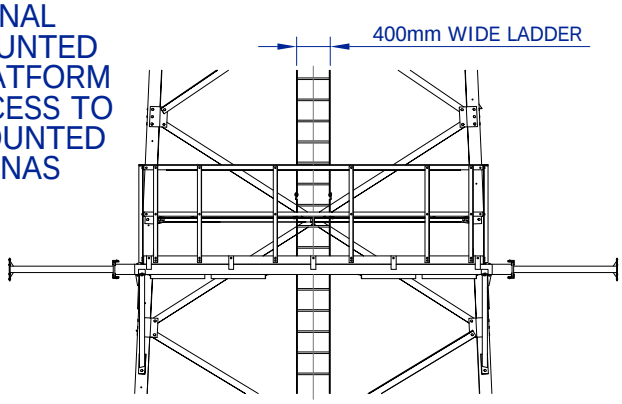
DISHES & SECTORS MOUNTED ON INTEGRAL ANTENNA POLES



SECTORS MOUNTED ON TOWERTOP POLE

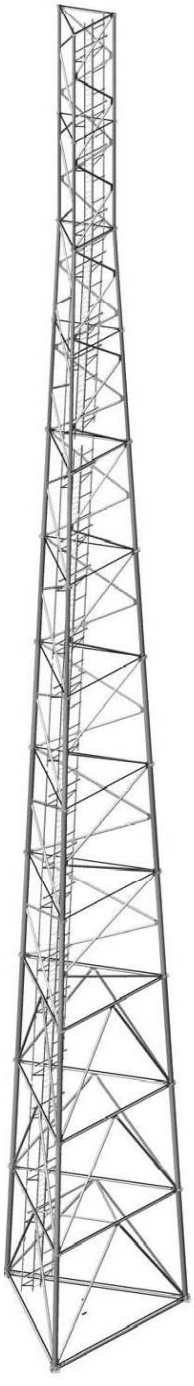


OPTIONAL FACE-MOUNTED WORK PLATFORM GIVES ACCESS TO BOOM-MOUNTED ANTENNAS

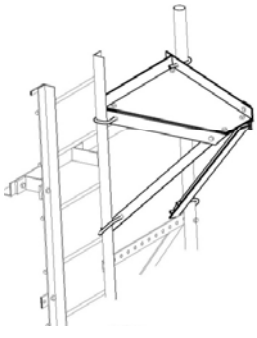


STRUCTURES DATA SHEET

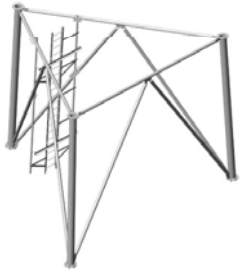
AD3030 TOWER - PRODUCT OVERVIEW



Top Parallel Panels



Rest Platforms



Bottom Panels

Stub/Template

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR / MICROWAVE / LIGHT BROADCAST
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	TAPERED WITH PARALLEL TOP
MAXIMUM BUILD HEIGHT	60 Meter
FACEWIDTH	TOP = 2000mm (Parallel Panels)
	BASE = 6400 mm (60m Tower)
PLATFORM SPACING	AVAILABLE AT 5m INTERVALS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	CIRCULAR TUBE
BRACE SECTION	CIRCULAR TUBE
DESIGN STEEL GRADE	IS:1161, YS=310 N/MM2
TYPICAL LOADING	CELLULAR / MICROWAVE / LIGHT BROADCAST
UTILISED DESIGN CODES	EIA-222-G
FINISH	GALVANISED

ATTRIBUTES

Lighter weight for required parameters, resulting in lower material, foundation & erection cost.

Logistics friendly as all members are less than 6 mtr.

Limited number of members result in redused erection time and lower chance of missing members.

Modular Platform.

Combined cable and climbing ladder is placed inside the tower cross section.

STRUCTURES DATA SHEET

AD3030 TOWER - PRODUCT OVERVIEW

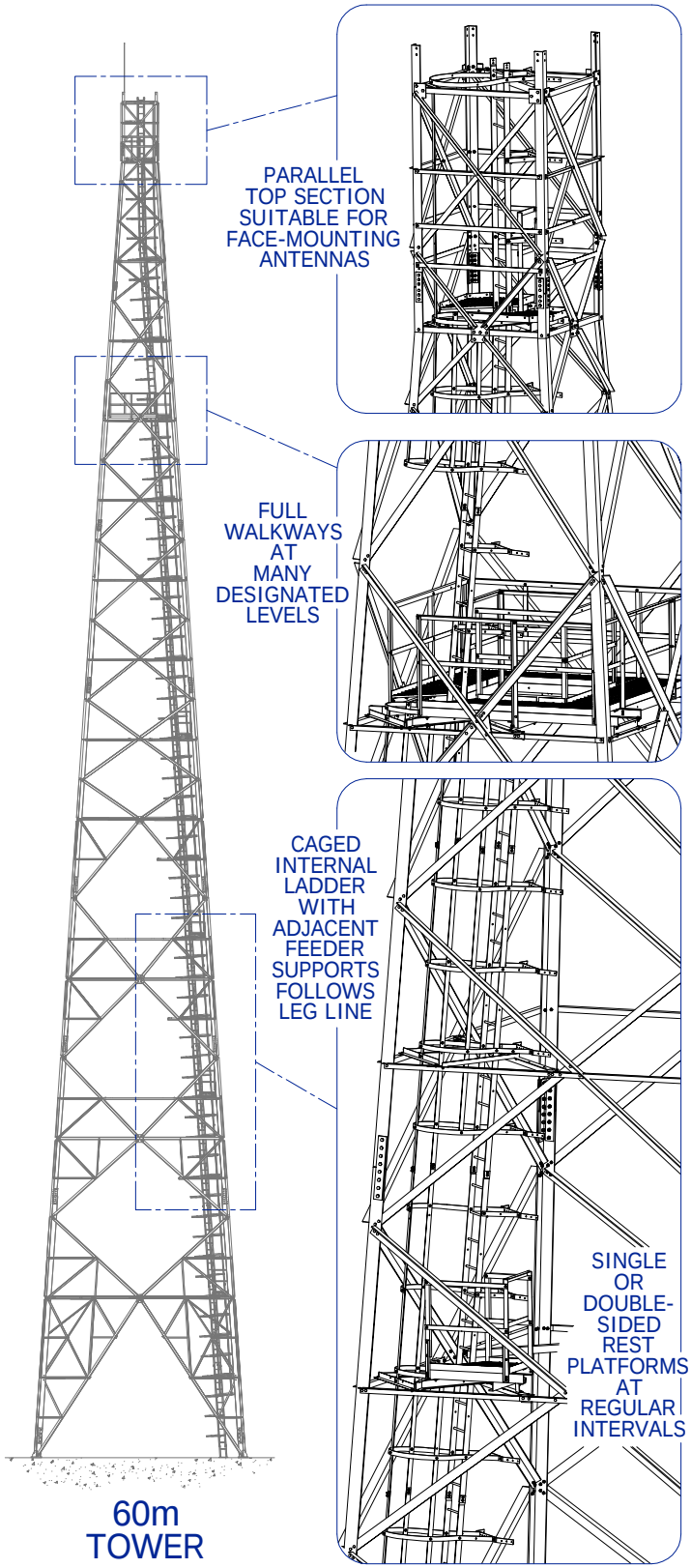
LADDER & CABLE TRAY

TOP PANELS

BOTTOM PANEL

STRUCTURES DATASHEET

AD7000 / TO7 TOWER - Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	BROADCAST
PLAN SHAPE	SQUARE
ELEVATION SHAPE	TAPERED WITH PARALLEL TOP
MAXIMUM BUILD HEIGHT	225m
FACEWIDTH	TOP = 640mm (TOP SPINE) MAX. BASE = 27620mm
PLATFORM SPACING	FLEXIBLE - REGULAR INTERVALS
ACCESS CONFIGURATION	INTERNAL CAGED LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 / SS400 & SS540
TYPICAL LOADING	HEAVY CELLULAR & MICROWAVE, LIGHT to VERY HEAVY BROADCAST
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Quick and easy to manufacture

Quick and easy to erect

Sturdy and safe structure to work on and maintain

Multiple application capability,
from 35m cellular to 225m heavy broadcast

Extendible feeder management system

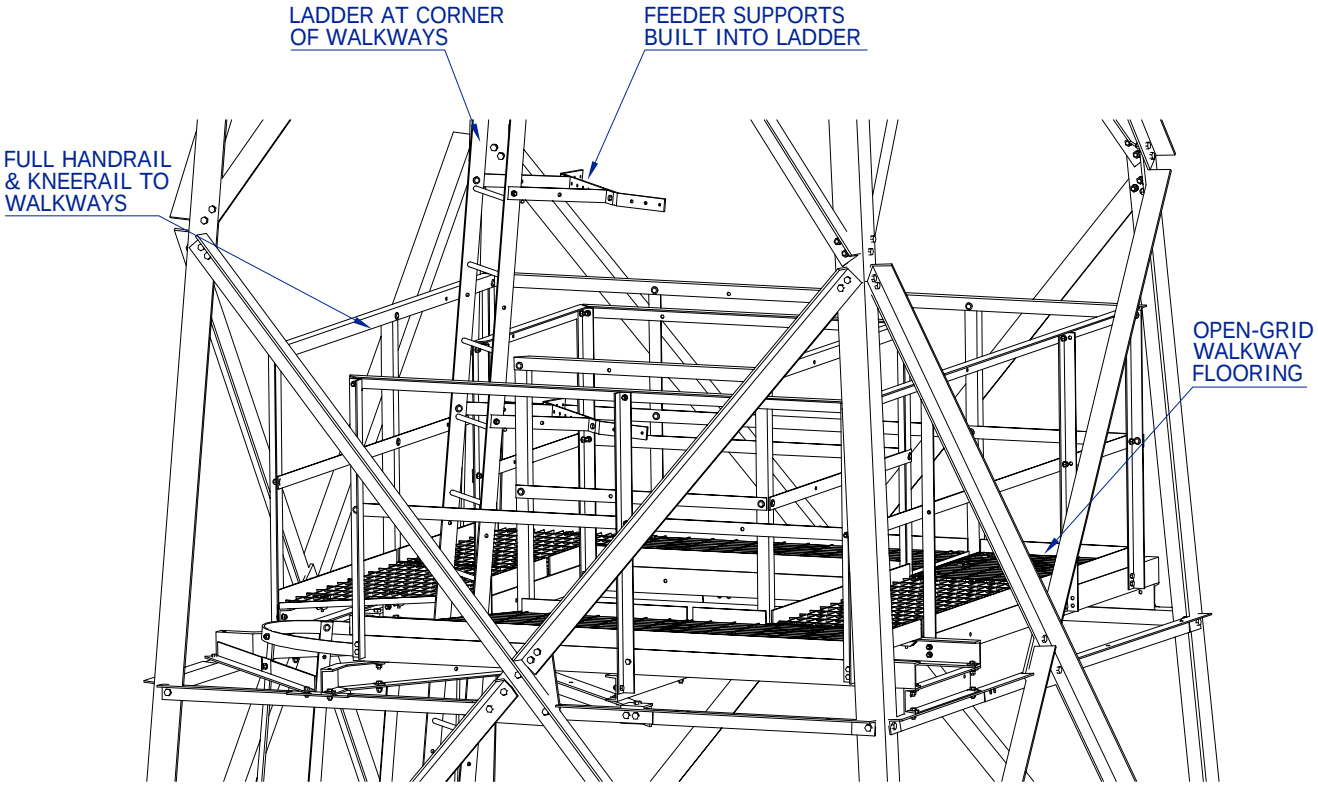
Datasheet Number SDS_7000_001 Rev.D

PRODUCT DESCRIPTION

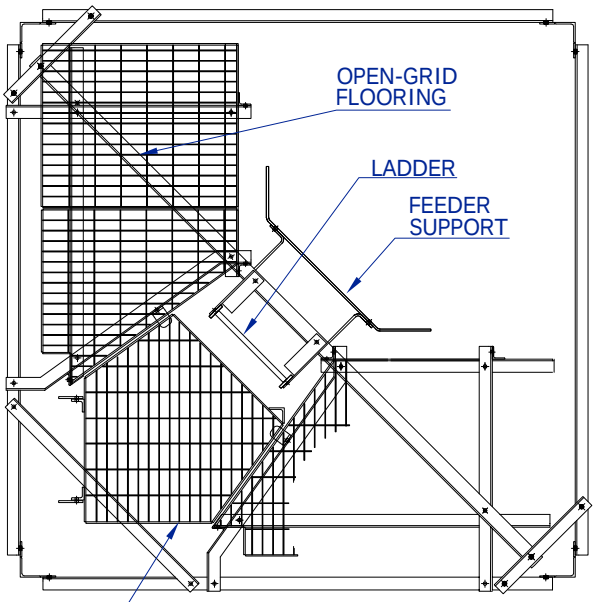
The AD7000 and TO7 have been designed as a multi-purpose tower capable of supporting heavy loads. This gives great versatility of usage, with applications ranging from cellular to heavy broadcast.
This structure has been utilised worldwide for many years, and in many forms.
It is designed to allow global economy of manufacture, with capability of manufacture from a variety steel sources.

STRUCTURES DATASHEET

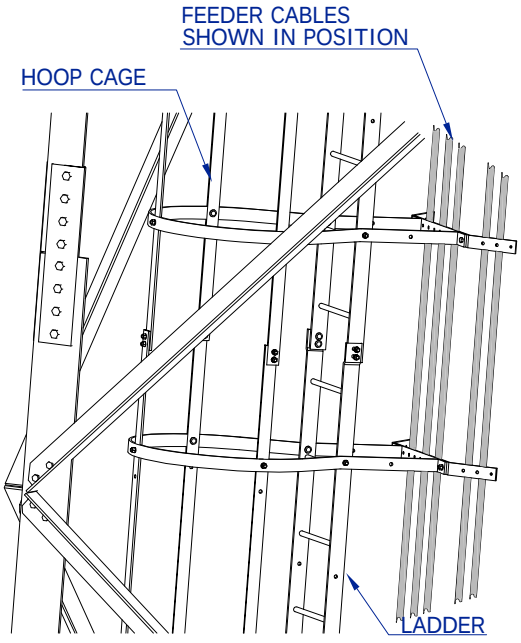
AD7000 / TO7 TOWER - Features



TYPICAL WALKWAY AREA ARRANGEMENT



PLAN ON DOUBLE-SIDED REST PLATFORM WITH LADDER TRAPDOOR

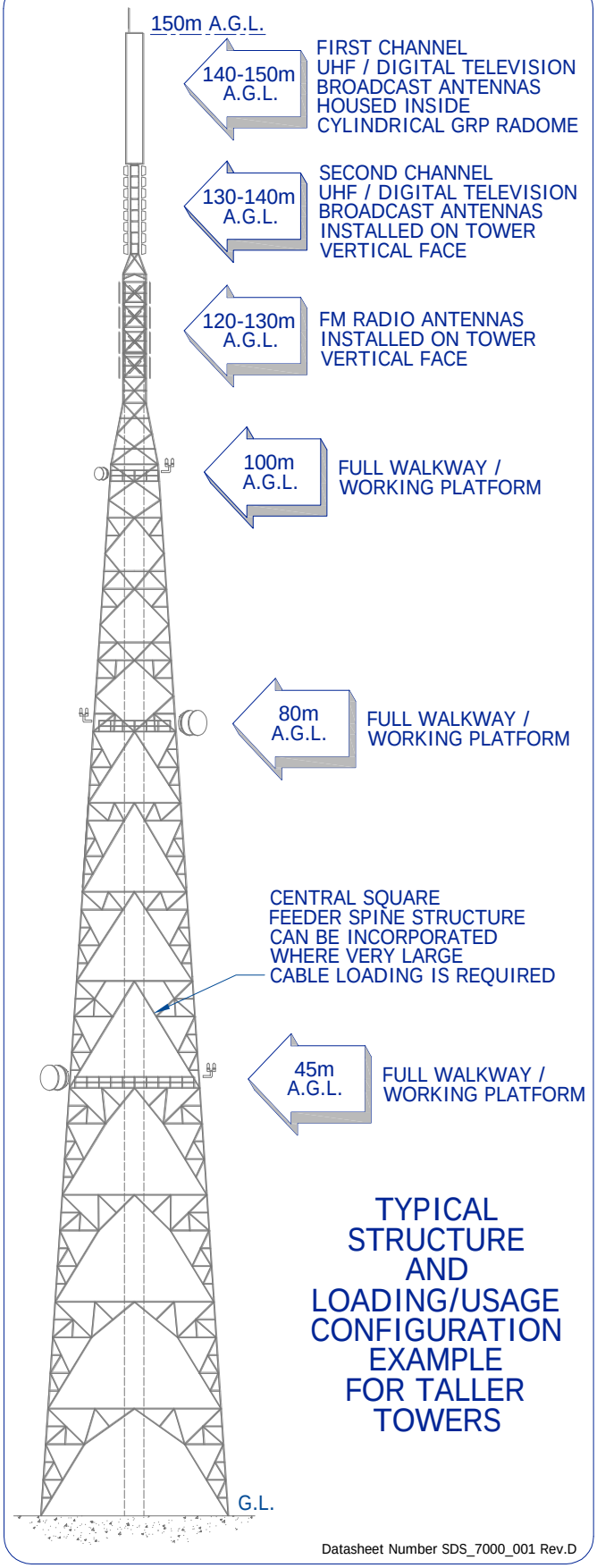


LADDER WITH HOOP CAGE & INTEGRAL FEEDER SUPPORT
FALL-ARREST SYSTEM ALSO AVAILABLE

Datasheet Number SDS_7000_001 Rev.D

STRUCTURES DATASHEET

AD7000 / TO7 - Features

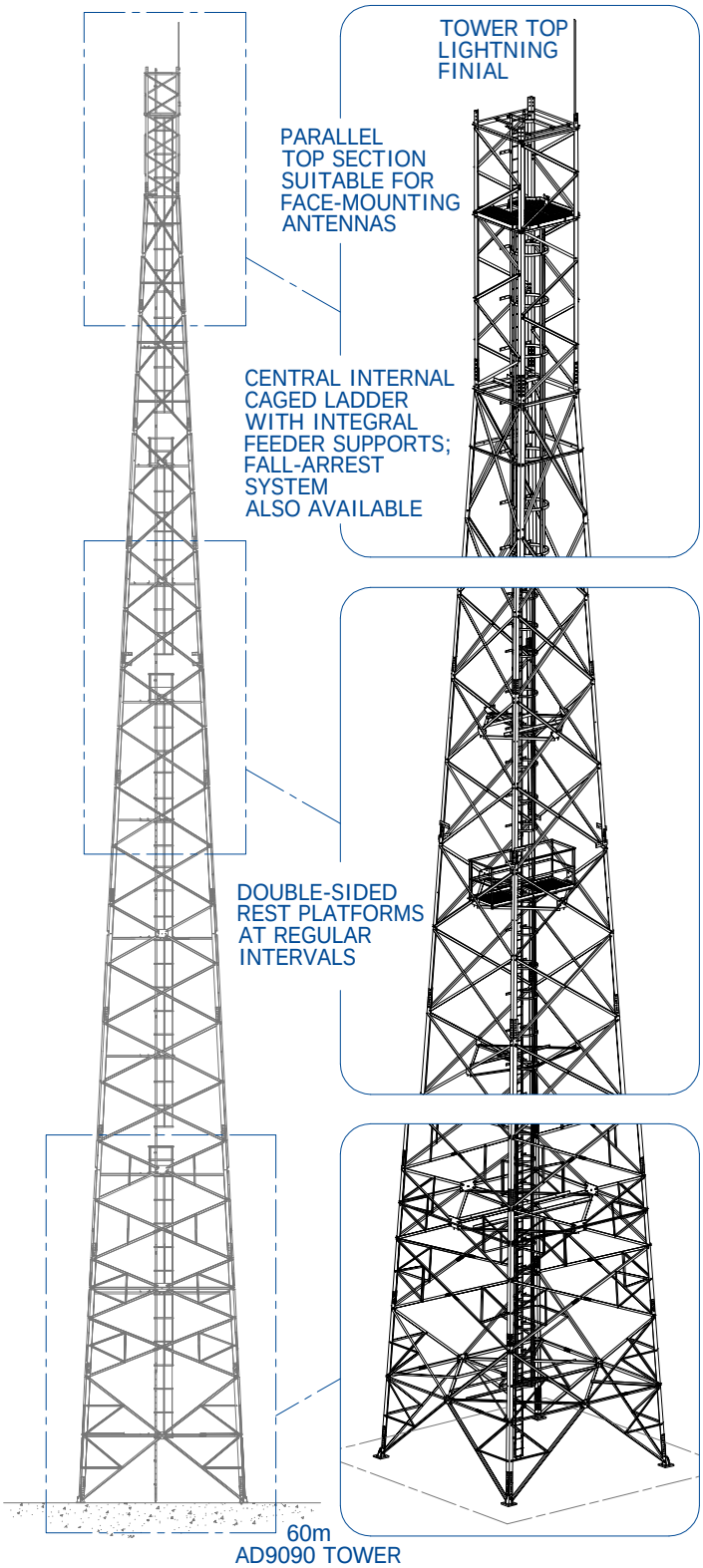


TYPICAL STRUCTURE AND LOADING/USAGE CONFIGURATION EXAMPLE FOR TALLER TOWERS

Datasheet Number SDS_7000_001 Rev.D

STRUCTURES DATASHEET

AD9090 TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR / MICROWAVE / LIGHT BROADCAST
PLAN SHAPE	SQUARE
ELEVATION SHAPE	TAPERED WITH PARALLEL TOP
MAXIMUM BUILD HEIGHT	115m
FACEWIDTH	TOP = 900mm (Parallel Panels) BASE = 10400mm (100m Tower)
PLATFORM SPACING	AVAILABLE AT 5m INTERVALS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355
TYPICAL LOADING	CELLULAR / MICROWAVE / LIGHT BROADCAST
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Lighweight for height

Good deflection characteristics for height

Easy logistics due to all-angle construction

Quick to fabricate and erect

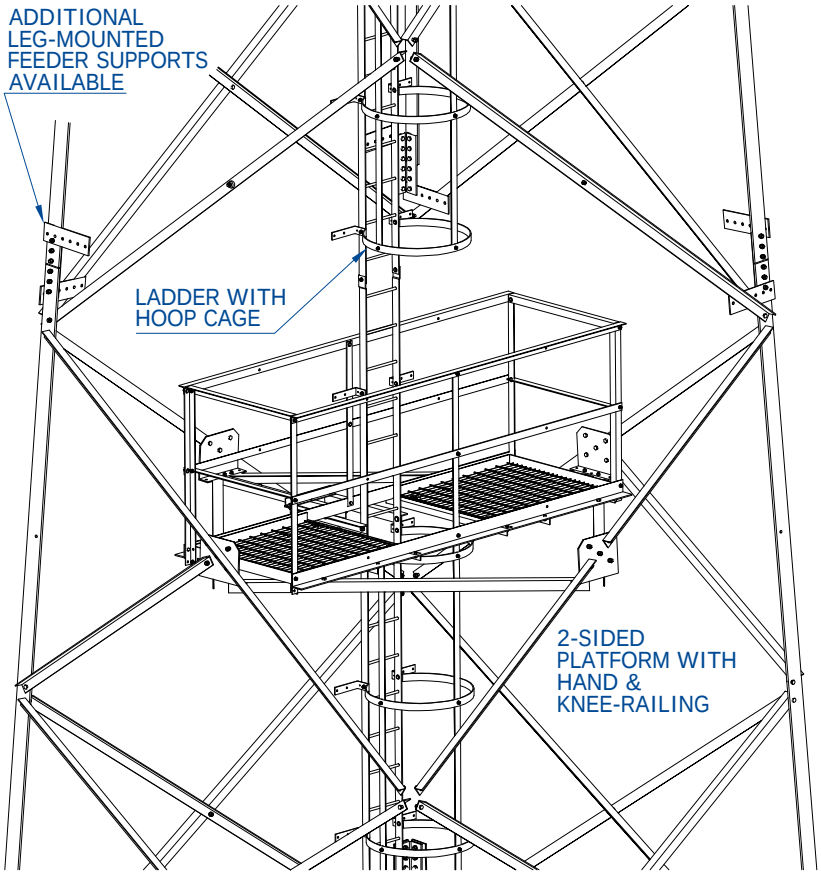
Small storage area requirements for tower components

PRODUCT DESCRIPTION

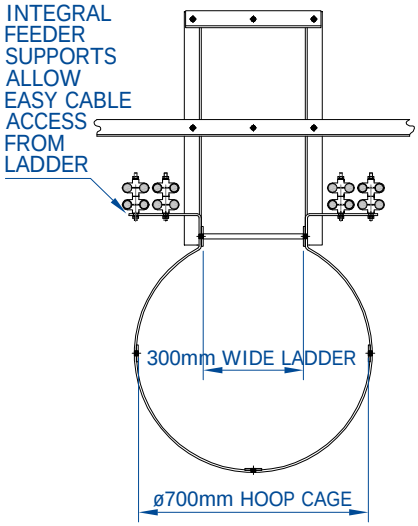
The AD9090 range of towers has been designed specifically as a general-purpose tower with good loading and deflection criteria to meet the requirements of major global operators.
The all-angle construction of this tower ensures efficient fabrication and logistics, and allows easy enhancements to the structure.
Used globally, many variations of this tower type have been designed to allow fabrication in many areas of the world.

STRUCTURES DATASHEET

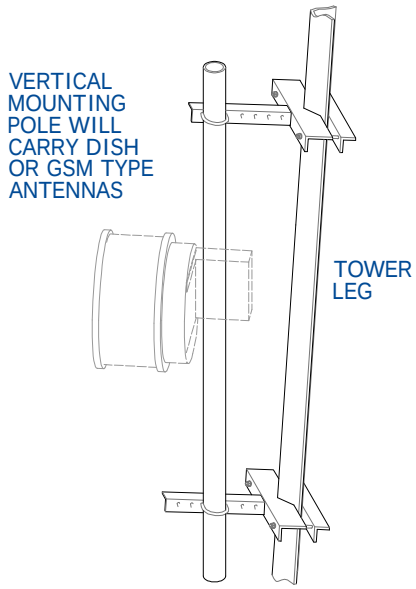
AD9090 TOWER - Features



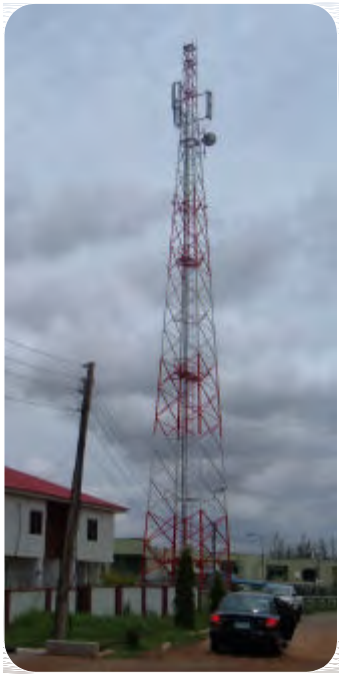
CENTRAL INTERNAL CAGED LADDER &
DOUBLE-SIDED REST PLATFORM
(N.B. Shown with some tower bracing removed
for clarity)



PLAN ON TYPICAL LADDER
& CAGE ARRANGEMENT



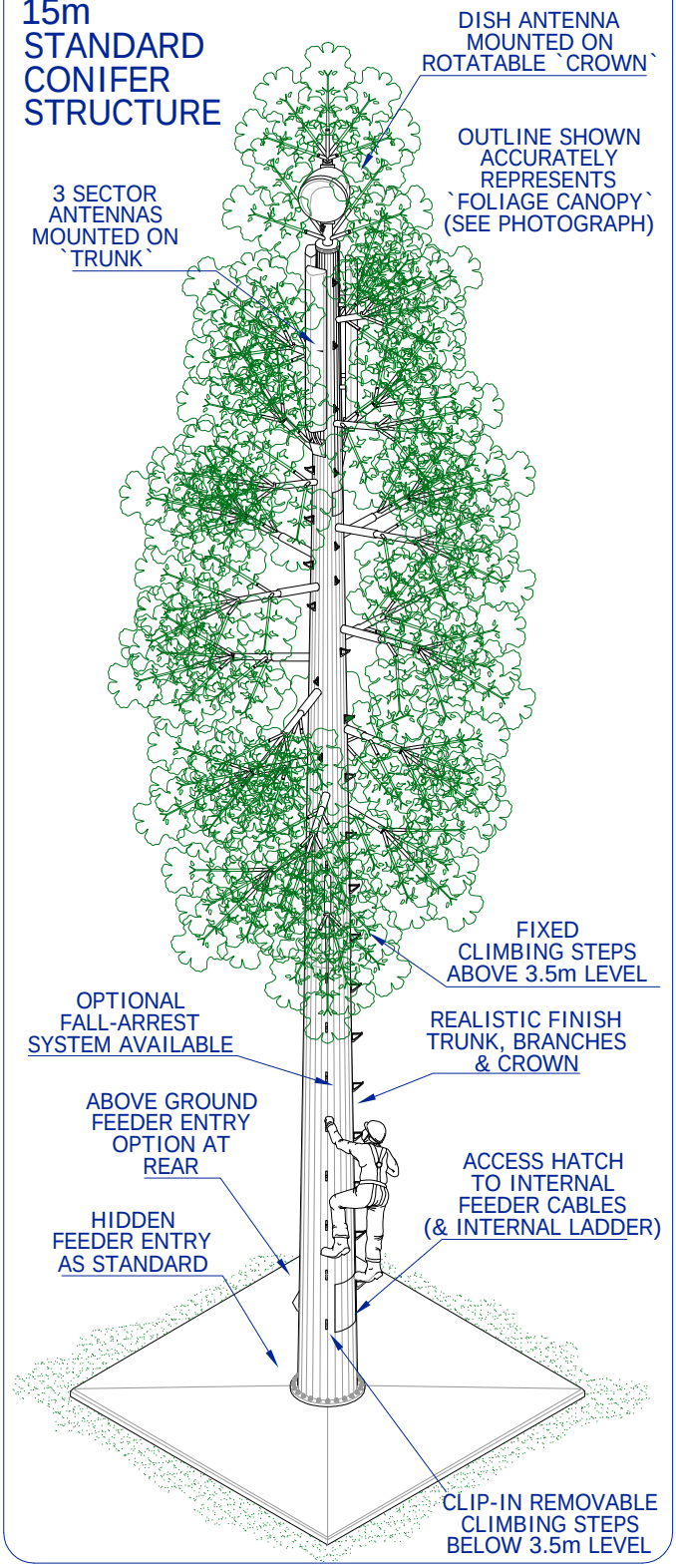
TYPICAL ANTENNA LEG MOUNT
FOR VERTICAL OR SLOPING TOWER LEG



STRUCTURES DATASHEET

CELLULAR CONIFER - Overview

15m STANDARD CONIFER STRUCTURE



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TREE
MAIN APPLICATION	CELLULAR
PLAN SHAPE	CIRCULAR MONOPOLE
ELEVATION SHAPE	TREE
BUILD HEIGHT RANGE	15m to 25m
FACEWIDTH	TOP = 280mm, BASE = 730mm (A/F, 15m STRUCTURE)
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	EXTERNAL CLIMBING RUNGS
`TRUNK` SECTION	FOLDED PLATE MONOPOLE
`BRANCH` SECTION	TUBE
DESIGN STEEL GRADE	S275
TYPICAL LOADING	3-SECTOR ARRAY, 1-0.6m DISH
UTILISED DESIGN CODES	CP3, BS5950
FINISH	GALVANISED TO BS.EN.ISO.1461
SITESHARE OPTION	NO

ATTRIBUTES

"Millennium Products" design award-winning product

Structures are extendible to 25m maximum

Offers effective stealth solution for greenfield installations

Excellent antenna performance with no degradation in rain or snow conditions

Wind loading proven by wind tunnel testing

Antennas are semi-concealed whilst maintaining clear `line of sight` in designated directions

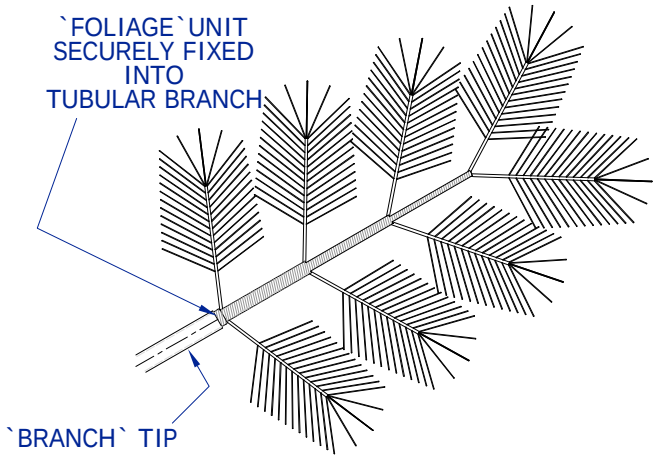
PRODUCT DESCRIPTION

The AlanDick Cellular Conifer has been designed to give a low visual impact whilst maintaining excellent technical performance.
This makes it an ideal product for greenfield installations, particularly in `sensitive` areas where planning permission is difficult to obtain.
Its realistic finish and authentically coloured `foliage` allows it to blend into countryside surroundings.
All structures are extendible in height to 25m.
The Cellular Conifer is transported to site in modular format, and therefore is simple and quick to erect.
For further details of AsiaPac version, see additional `Cellular Pine Tree` datasheet.

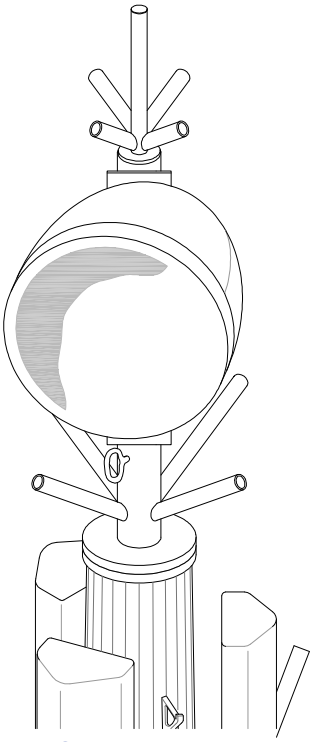
Datasheet Number SDS_CON_001 Rev.B

STRUCTURES DATASHEET

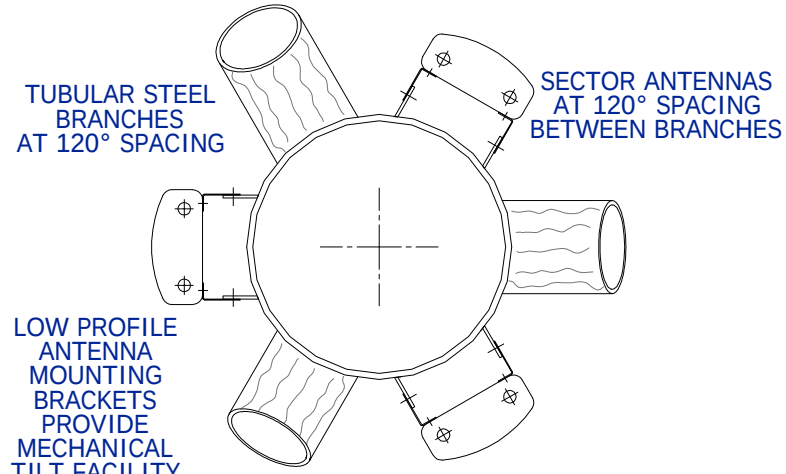
CELLULAR CONIFER - Features



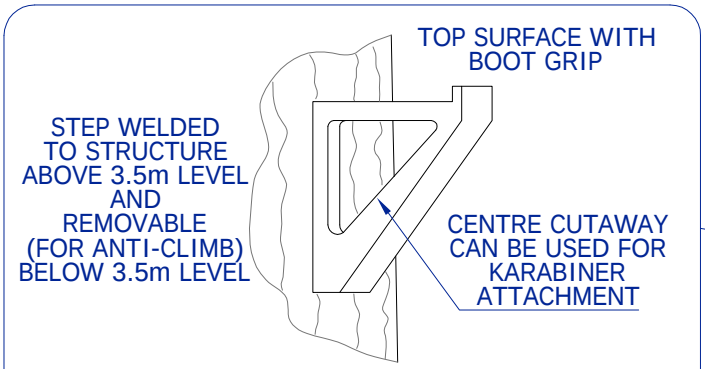
VIEW ON `BRANCH` TIP FITTED WITH `FOLIAGE` INSERT



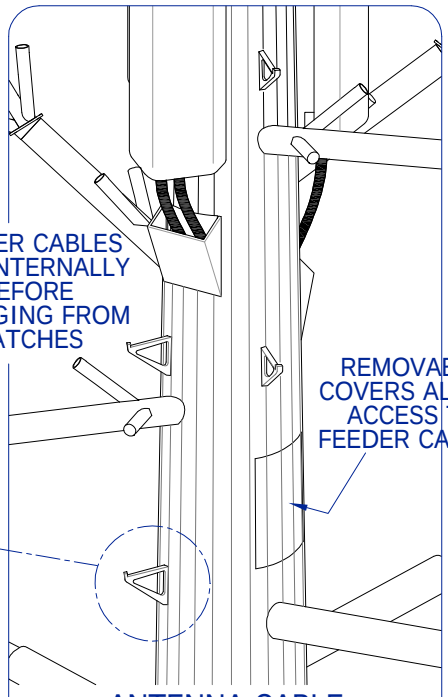
DISH ANTENNA MOUNTED ON TOP POLE
(FOLIAGE BRANCHES NOT SHOWN)



PLAN SECTION SHOWING SECTOR ANTENNA POSITIONS



TYPICAL CLIMBING STEP
(Tested to BS.EN.795)



ANTENNA CABLE FEED & ACCESS
(FOLIAGE BRANCHES NOT SHOWN)

Datasheet Number SDS_CON_001 Rev.B

STRUCTURES DATASHEET

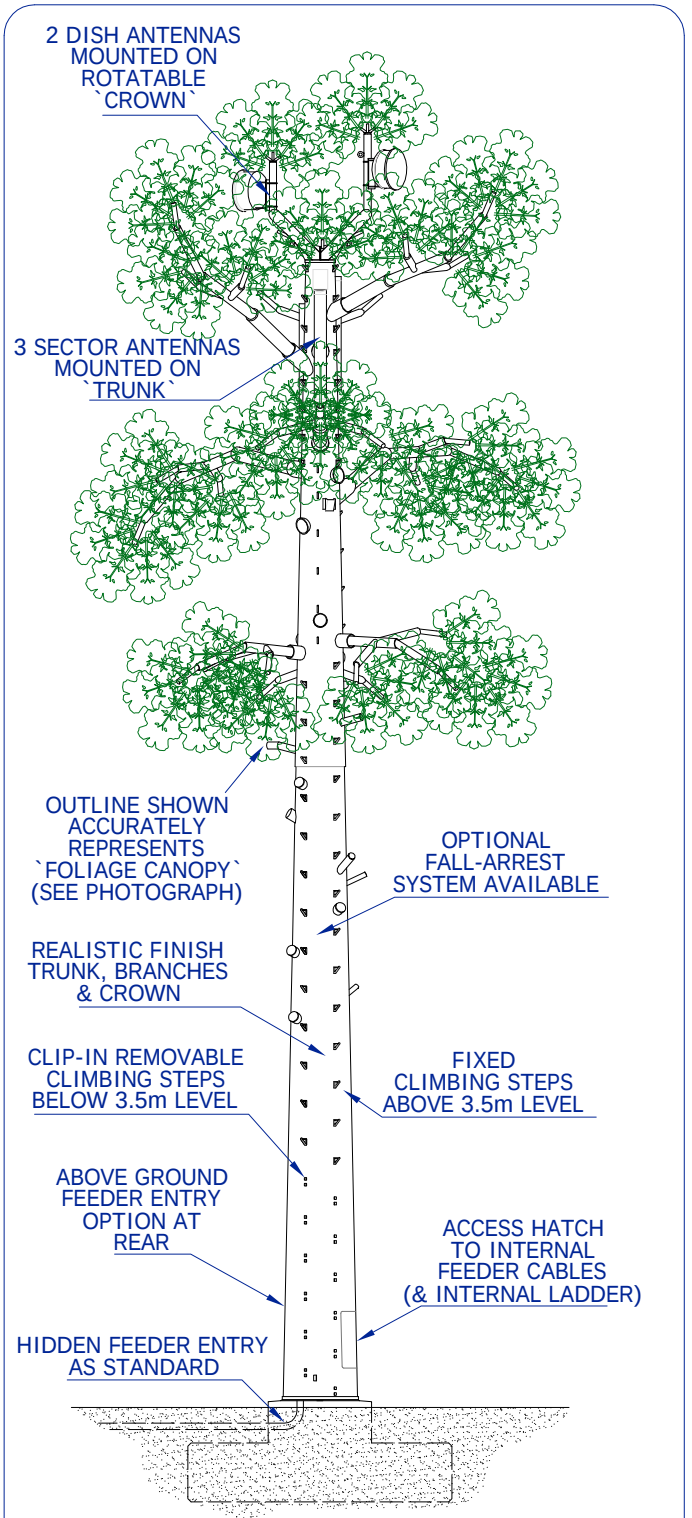
CELLULAR CONIFER - Photo Images

ANTENNAS IN `FOLIAGE`
GREEN/BROWN COLOURED
ANTENNA OPTION AVAILABLE
TO MINIMISE VISUAL IMPACT

ALANDICK
CELLULAR CONIFER
STRUCTURE

STRUCTURES DATASHEET

CELLULAR SCOTS PINE - Overview



ELEVATION ON 20m STRUCTURE

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TREE
MAIN APPLICATION	CELLULAR
PLAN SHAPE	CIRCULAR MONOPOLE
ELEVATION SHAPE	TREE
BUILD HEIGHT RANGE	15m to 25m
FACEWIDTH	TOP = 460mm, BOTTOM = 1350mm
PLATFORM SPACING	INTERNAL REST SEATS @ 7.5m c/c
ACCESS CONFIGURATION	EXTERNAL CLIMBING RUNGS and INTERNAL LADDER
`TRUNK` SECTION	FOLDED PLATE MONOPOLE
`BRANCH` SECTION	TUBE
DESIGN STEEL GRADE	S275
TYPICAL LOADING	3-SECTOR ARRAY, 3-0.6m DISHES
UTILISED DESIGN CODES	CP3, BS5950
FINISH	GALVANISED TO BS.EN.ISO.1461
SITESHARE OPTION	YES

ATTRIBUTES

"Millenium Products" design award winning product

Structures are extendible to 25m maximum

Offers effective stealth solution for greenfield installations

Excellent antenna performance, with no degradation in rain or snow conditions

Wind loading proven by wind tunnel testing

Antennas are semi-concealed whilst giving clear `line of sight` in designated directions

PRODUCT DESCRIPTION

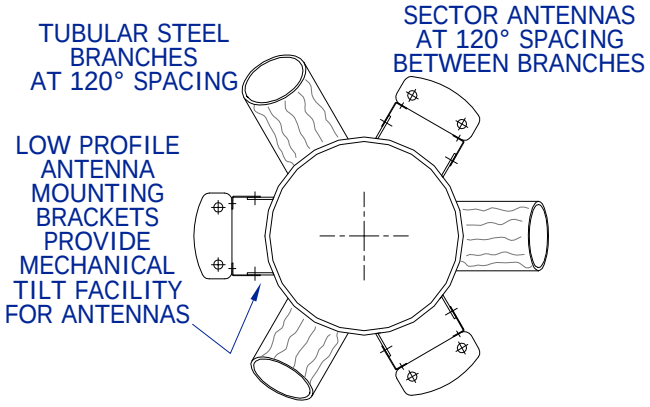
The AlanDick Cellular Scots Pine is a `Millennium Products` Design Award winning structure, and has been designed to give low visual impact whilst maintaining excellent technical performance.
This makes it an ideal product for greenfield installations, particularly in `sensitive` areas where planning permission is difficult to obtain.
Its realistic finish and authentically coloured `foliage` allows it to blend into countryside surroundings.

All structures are extendible in height to 25m, and can also be upgraded to carry siteshare loads by the addition of special antenna mounts.
The Cellular Scots Pine is transported to site in modular format, and therefore is simple and quick to erect.
For further details of AsiaPac version, see additional `Cellular Pine Tree` datasheet.

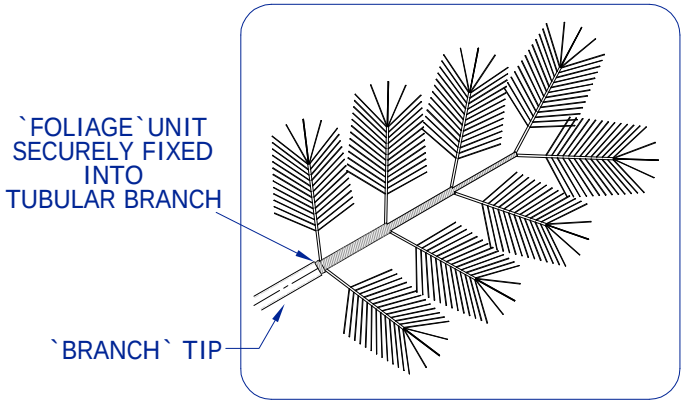
Datasheet Number SDS_SCOT_001 Rev.B

STRUCTURES DATASHEET

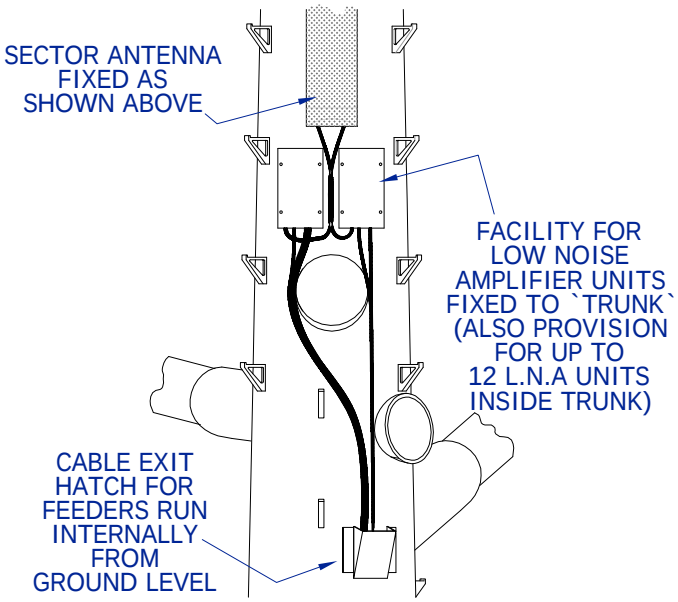
CELLULAR SCOTS PINE - Features



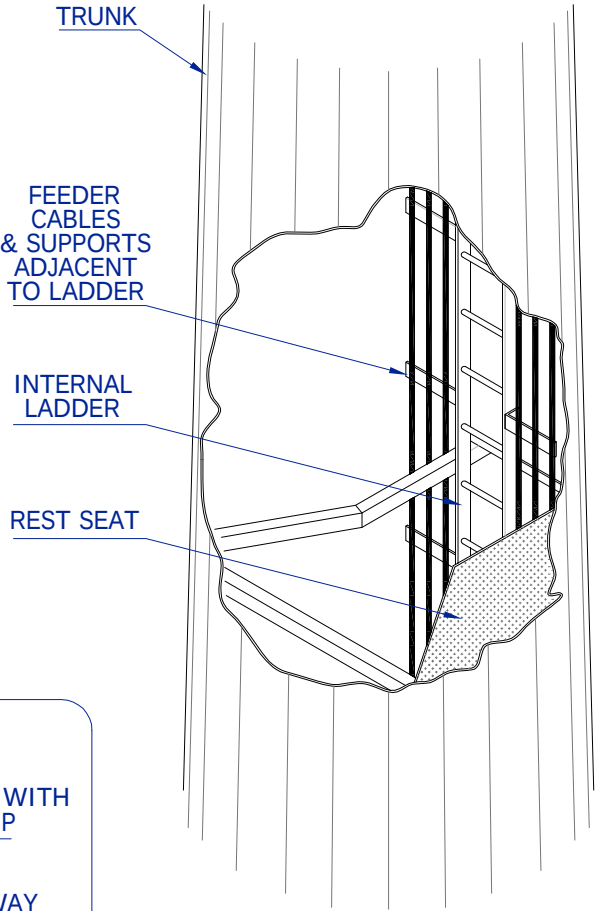
PLAN SECTION SHOWING SECTOR ANTENNA POSITIONS



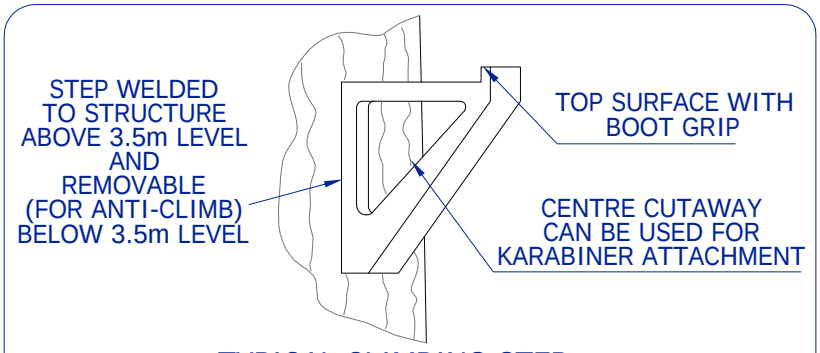
VIEW ON `BRANCH` TIP FITTED WITH `FOLIAGE` INSERT



ELEVATION SHOWING TYPICAL FEEDER CABLE ARRANGEMENT



3D `CUTAWAY` VIEW SHOWING INTERNAL LADDER WITH INTEGRAL FEEDER SUPPORTS



TYPICAL CLIMBING STEP (Tested to BS.EN.795)

Datasheet Number SDS_SCOT_001 Rev.B

STRUCTURES DATASHEET

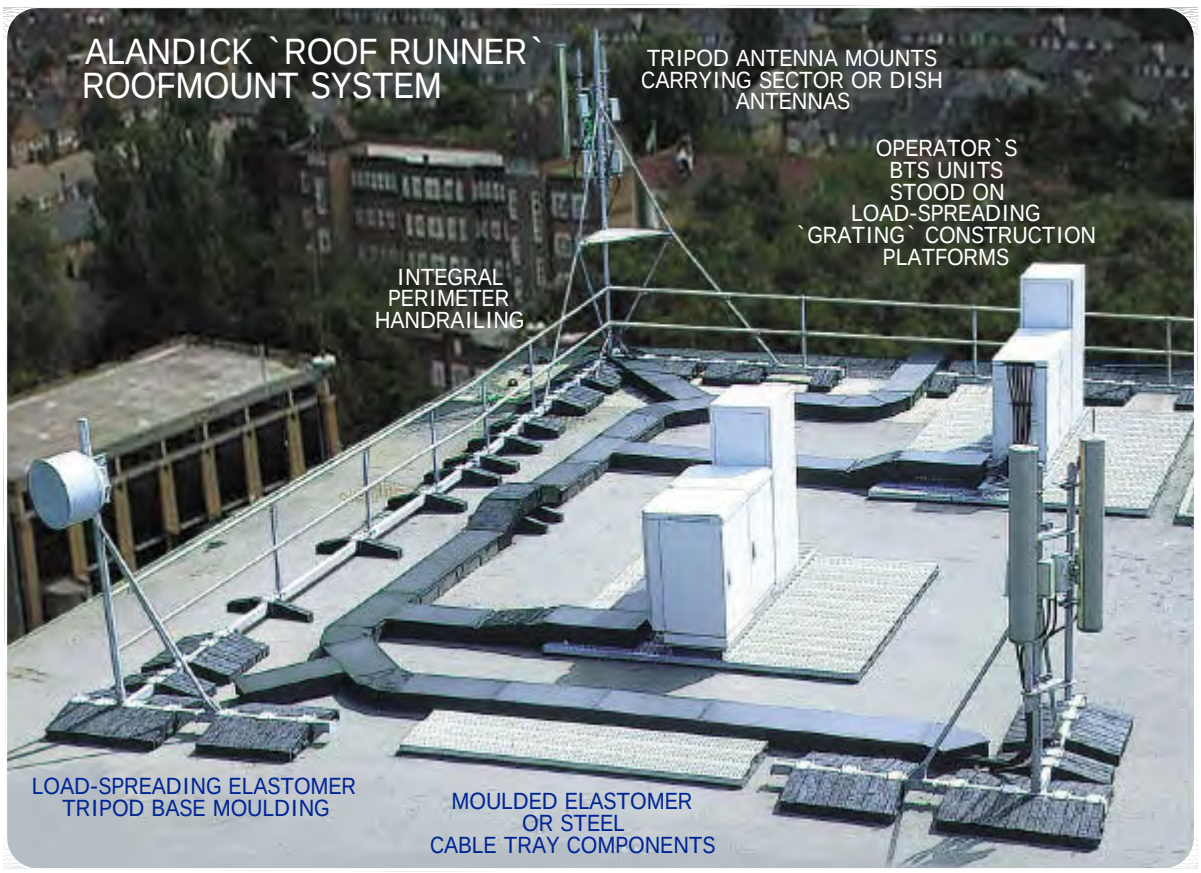
CELLULAR SCOTS PINE - Features

MILLENNIUM PRODUCTS
AWARD WINNING
CELLULAR SCOTS PINE
STRUCTURE

BRANCH MEMBER UNDERGOING
WIND TUNNEL TESTING

STRUCTURES DATASHEET

`ROOF RUNNER` RDS - Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT	POLE/RAIL CONSTRUCTION	GALVANISED STEEL TUBE
MAIN APPLICATION	CELLULAR & LIGHT MICROWAVE	BASE/TRAY CONSTRUCTION	ELASTOMER
TYPICAL LOADING	CELLULAR & LIGHT MICROWAVE	DESIGN STEEL GRADE	S275
ANTENNA MOUNT HEIGHTS	2m / 3m / 4m / 5m	SITESHARE CAPACITY	YES
FINISH	GALVANISED TO BS.EN.ISO.1461	UTILISED DESIGN CODES	CP3, BS.5950

ATTRIBUTES

Non-penetrative free-standing components result in low imposed roof loads

Available in `piecemeal` component form, allowing ultimate build flexibility, extendibility, and ease of transport

Exceptionally quick to assemble and position

Superior cost-effectiveness over traditional penetrative rooftop solutions

PRODUCT DESCRIPTION

Roof Runner is an innovative range of products from AlanDick, specifically engineered as a rapid deployment, non-penetrative rooftop cable management system. It includes a range of antenna and microwave dish mounting solutions, platforms to support outdoor equipment cabinets, cables and safety handrailing.

The key to Roof Runner`s success is its ease of installation, potential extendibility and ultimate flexibility. All components are non-penetrative with load-spreading bases moulded from elastomer material, and therefore freestanding. This enables the antenna mounts to withstand maximum design loads, whilst minimising static roof loads.

The Roof Runner system can be built on any rooftop site, or pre-constructed and craned into position, making it extremely quick to install. This in turn significantly reduces cost and `time to air` when compared with traditional rooftop solutions. To see the full range of Roof Runner products, and for installation information, request AlanDick Roof Runner Design Guide and Technical Manual documents.

Datasheet Number SDS_RDS_RR_001 Rev.A

STRUCTURES DATASHEET

`ROOF RUNNER` RDS - Features

REPRESENTATIVE EXAMPLE OF COMPONENT RANGE

MOUNTS & RAILS

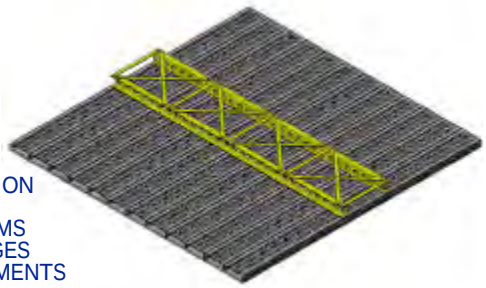
ANTENNA TRIPODS ARE 2m, 3m OR 4m IN HEIGHT AND ARE AVAILABLE WITH OR WITHOUT HANDRAILING - ALL HAVE LOAD-SPREADING ELASTOMER BASE MOULDINGS.

TWIN ANTENNA POLE MOUNT

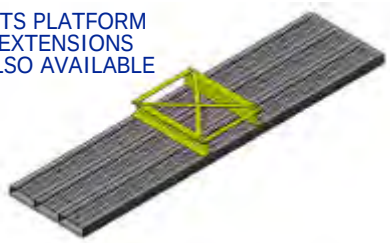
HANDRAILING AVAILABLE IN STAIGHT & CORNER CONFIGURATION WITH LOAD-SPREADING ELASTOMER BASE MOULDINGS

BTS PLATFORMS

`GRATING` CONSTRUCTION LOAD-SPREADING ROOFTOP BTS PLATFORMS AVAILABLE WITH GILLAGES TO SUIT CABINET REQUIREMENTS

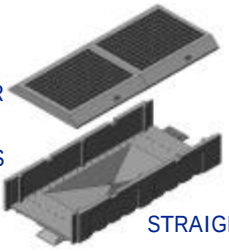


BTS PLATFORM EXTENSIONS ALSO AVAILABLE



CABLE TRAY COMPONENTS

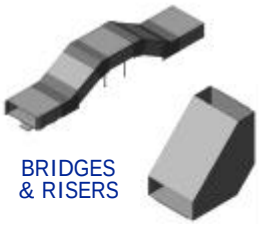
A COMPREHENSIVE RANGE OF MOULDED ELASTOMER &STEEL CABLE TRAY SYSTEM COMPONENTS IS AVAILABLE



STRAIGHT

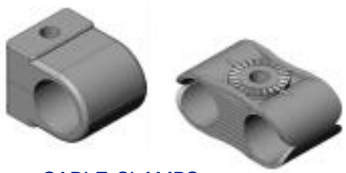
CORNER

TEE



BRIDGES & RISERS

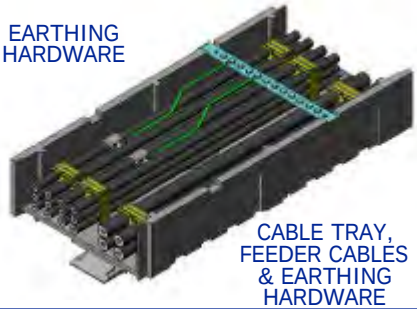
CLAMPS, HARDWARE & EARTHING



CABLE CLAMPS

HINGES, BRACKETS & CABLE SUPPORTS

EARTHING HARDWARE

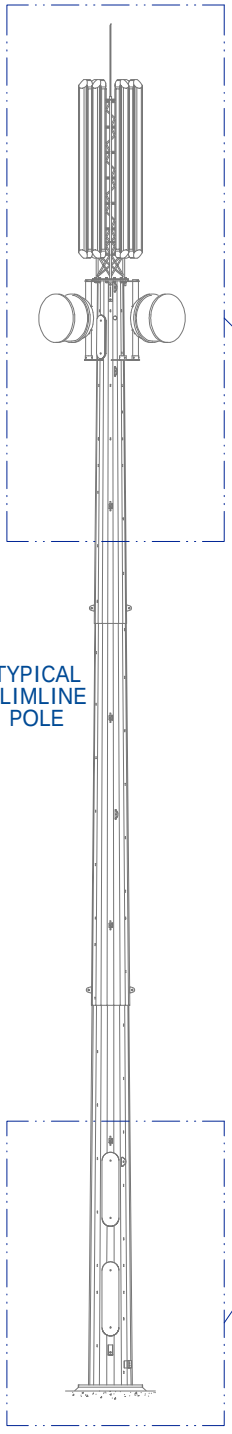


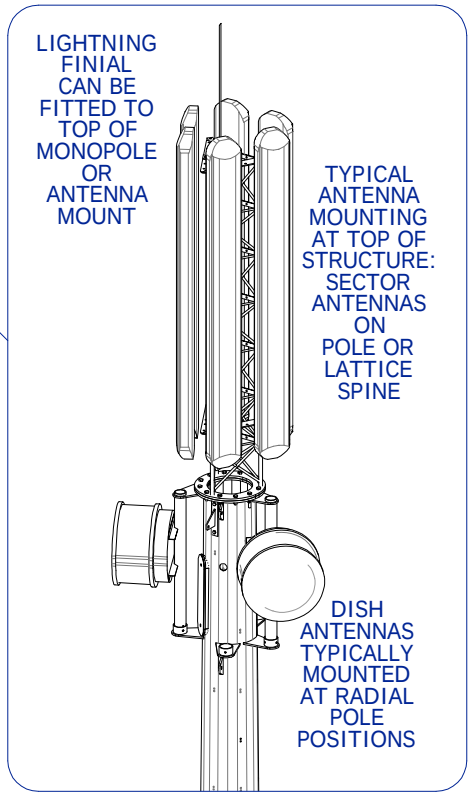
CABLE TRAY, FEEDER CABLES & EARTHING HARDWARE

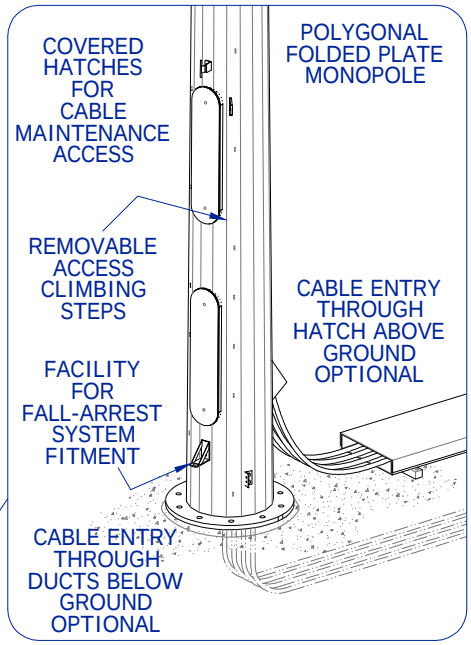
Datasheet Number SDS_RDS_RR_001 Rev.A

STRUCTURES DATASHEET

POLYGONAL MONOPOLES - Overview







STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MONOPOLE
MAIN APPLICATION	CELLULAR & LIGHT MICROWAVE
PLAN SHAPE	ROUND
ELEVATION SHAPE	TAPERED
MAXIMUM BUILD HEIGHT	30m GENERALLY / 45m MAXIMUM
FACEWIDTH	VARIOUS
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	EXTERNAL LADDER / CLIMB RUNGS
POLE CONSTRUCTION	FOLDED PLATE
BRACE SECTION	N/A
DESIGN STEEL GRADE	S275 OR EQUIVALENT
TYPICAL LOADING	SINGLE or MULTI-USER CELLULAR / LIGHT MICROWAVE
UTILISED DESIGN CODES	CP3, BS.8100, EIA
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Low visual impact due to smooth, feature-free construction

High windspeed/loading ratio

Discreet but accessible internal feeder cable management

Quick to erect

PRODUCT DESCRIPTION

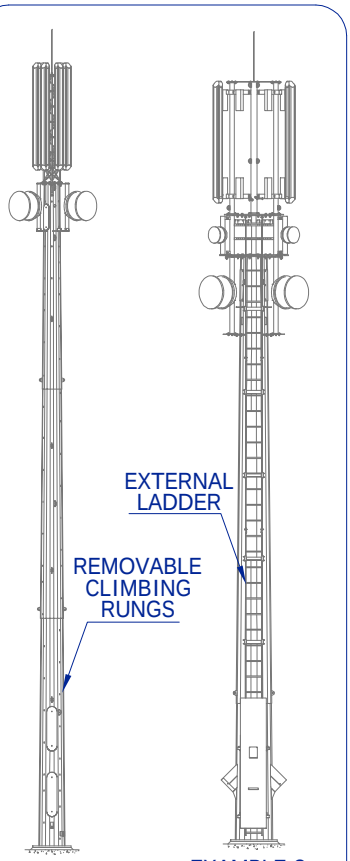
AlanDick polygonal folded plate monopole structures are a low-profile alternative to traditional lattice towers and masts.

Developed primarily as a low visual impact solution for the worldwide cellular market, this type of structure is ideally suited to carry Cross-Polar Antennas. Furthermore, designs also accommodate deflection criteria suitable for microwave links.
Structures are fully galvanised, including internal surfaces of folded plate poles.
A comprehensive range of ancillary products is available for fitment to these structures, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas. Cable management is invariably internal, reducing visual impact and wind area, and protecting cables and equipment.
Monopoles have proved to be popular with planning authorities, and continue to be employed on a widespread basis by worldwide cellular networks.

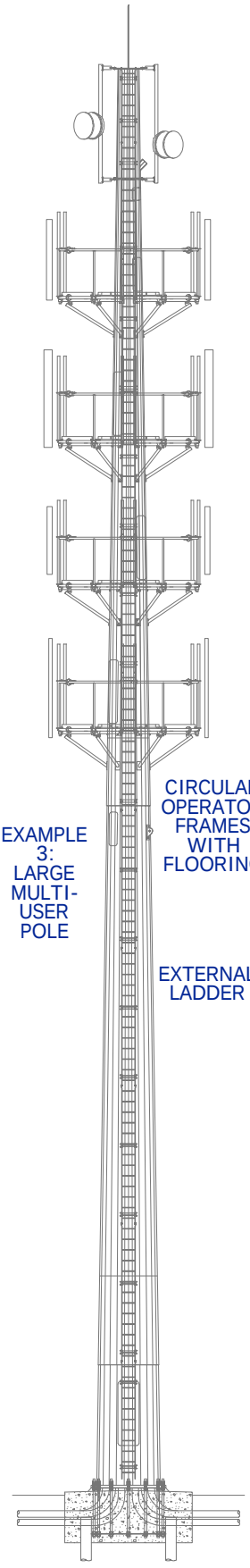
Datasheet Number SDS_MONO_001 Rev.A

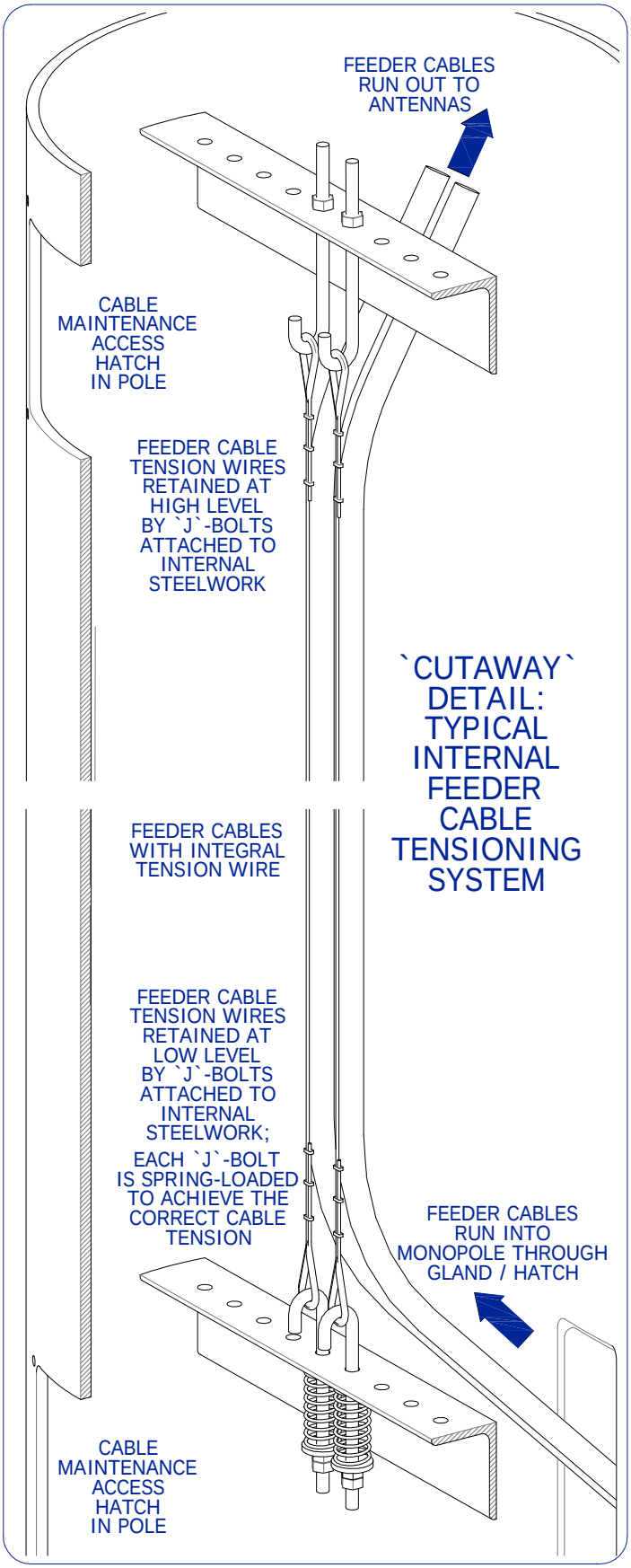
STRUCTURES DATASHEET

POLYGONAL MONOPOLES - Range



TYPICAL LOADING ON 2-USER MONOPOLE: SECTORS, DISHES & AMPLIFIER UNITS

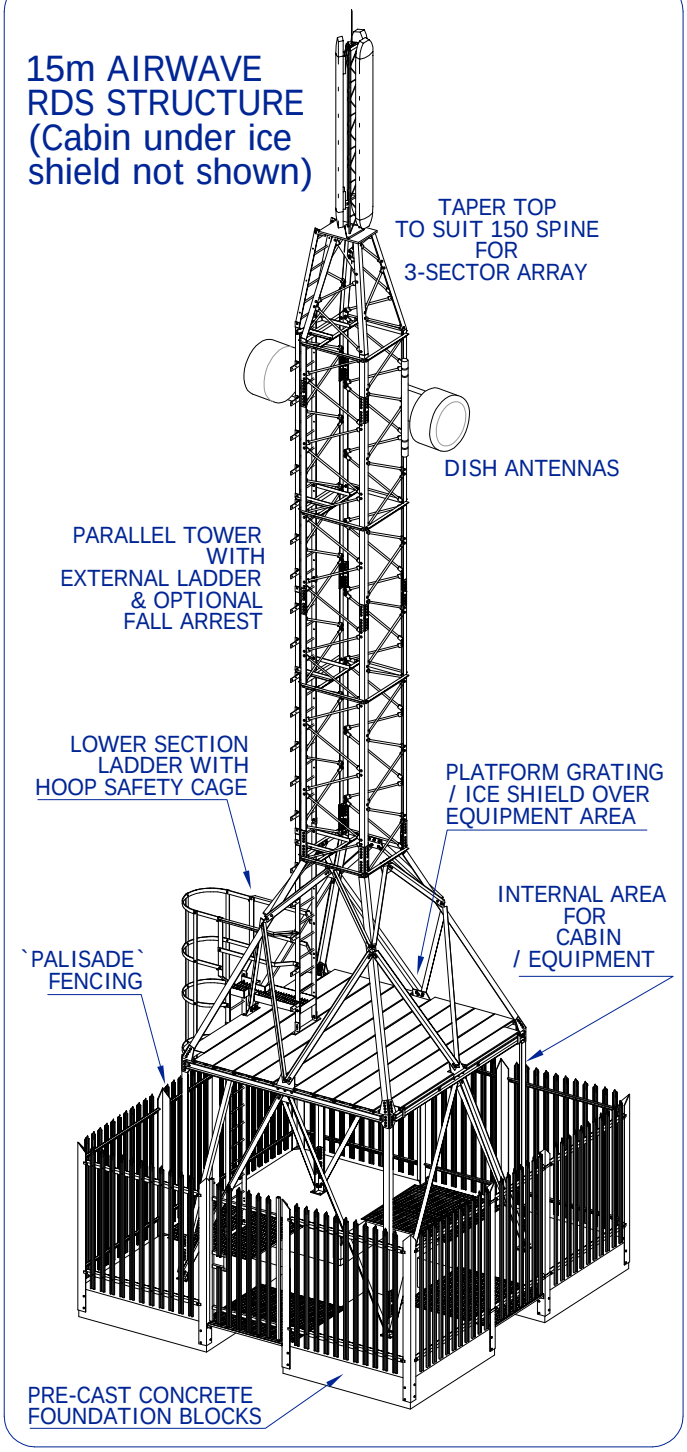




Datasheet Number SDS_MONO_001 Rev.A

STRUCTURES DATASHEET

RDS-CB/SSL - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT SOLUTION
MAIN APPLICATION	CELLULAR
PLAN SHAPE	SQUARE
ELEVATION SHAPE	PARALLEL WITH TAPER BASE
MAXIMUM BUILD HEIGHT	15m
FACEWIDTH	TOP = 1000mm, BASE = 3250mm
PLATFORM SPACING	PLATFORM OVER CABIN
ACCESS CONFIGURATION	EXTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ROD / ANGLE
DESIGN STEEL GRADE	S275
TYPICAL LOADING	3-SECTOR ARRAY, 2 x 0.6m DISHES
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100: 30m/s WINDSPEED
MIN. GBP REQUIREMENT	40 kN/m²
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Quick to erect, with minimal ground preparation.

Small area requirement as equipment is contained within the structure.

Equipment held in a secure and sheltered environment.

Relocatable, with 100% re-use of structure.

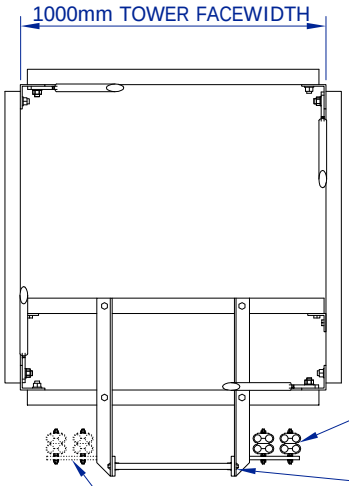
Rod braces give low visual impact & maximise internal space.

PRODUCT DESCRIPTION

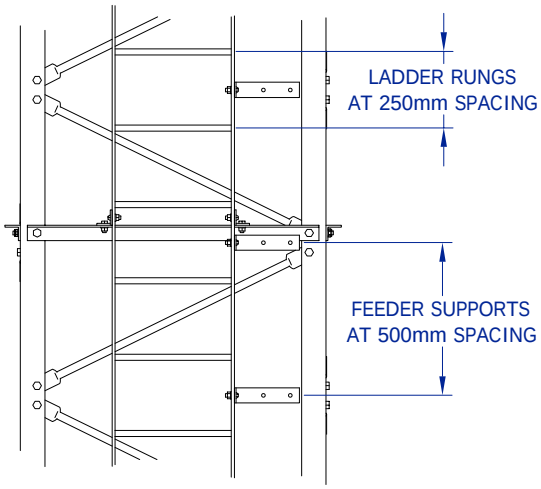
Designed specifically as a Rapid Deployment Solution for cellular applications, the RDS-CB/SSL is angle and bar bolted construction which achieves a light and stiff, simple to assemble structure which can be transported to site in modular or piecemeal form.
Ground preparation is minimal, with no additional excavation requirement for fencing or equipment. Cables and services are contained within the base.
All this ensures that the customer`s `time to air` is reduced dramatically when compared with traditional cell site construction, with the added benefit of easy relocatability.

STRUCTURES DATASHEET

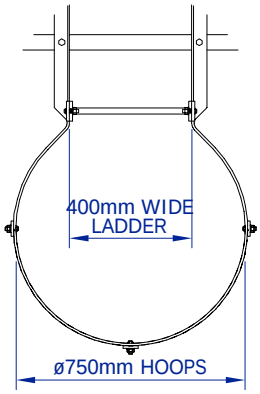
RDS-CB/SSL - Features



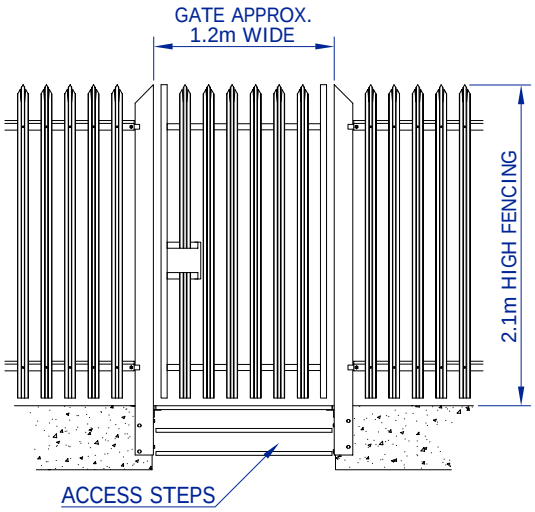
PLAN VIEW ON TOWER SHOWING POSITION OF EXTERNAL LADDER & ADJACENT FEEDER CABLE SUPPORTS (Internal ladder option available)



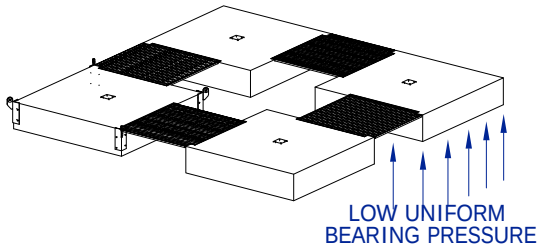
ELEVATION ON TOWER SHOWING EXTERNAL LADDER & ADJACENT FEEDER CABLE SUPPORTS



PLAN VIEW ON LADDER LOWER SECTION WITH HOOP SAFETY CAGE



ELEVATION ON SECTION OF PALISADE FENCING WITH LOCKABLE 1.2m WIDE GATE



3D PROJECTION: 4 PRE-CAST CONCRETE FOUNDATION BLOCKS (1 BLOCK PER LEG) & FLUSH-FITTED OPEN GRID FLOOR PANELS - CABLES, EQUIPMENT & FENCE PROVISION ALL INTEGRAL

Datasheet Number SDS_RDS_SSL_001 Rev.B

STRUCTURES DATASHEET

SCREWPILE SITES - Product Overview

SITE AREA TOPSOIL IS CLEARED & POSITIONS FOR HELICAL PILES MARKED

HELICAL PILES ARE DRIVEN INTO GROUND

GRILLAGE IS PLACED ONTO PILES, & FENCE, FLOORING, STRUCTURE & CABINETS FITTED (LATTICE TOWER STRUCTURE SHOWN)

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	RAPID DEPLOYMENT
MAIN APPLICATION	CELLULAR
DESIGN STEEL GRADE	VARIES
SITESHARE CAPACITY	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	MULTI-USER CELLULAR, MULTI-USER MICROWAVE
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Quick to erect, with minimal ground preparation, giving significantly shorter time to `on-air` than conventionally based structures.

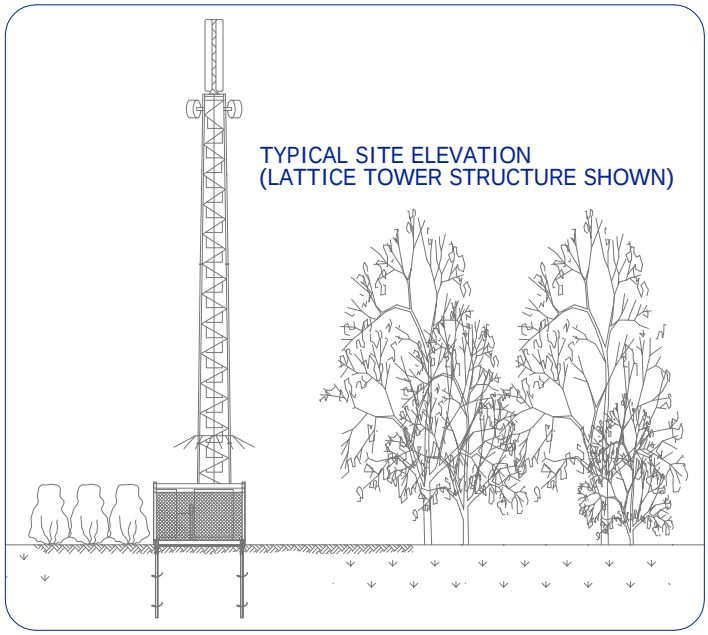
Significant cost savings over traditional concrete foundations.

All-steel structure with no requirement for concrete

Grillage base supports tower and all equipment.

Equipment held in an integral fenced compound.

Relocatable, with 100% re-use of structure.



TYPICAL SITE ELEVATION (LATTICE TOWER STRUCTURE SHOWN)

PRODUCT DESCRIPTION

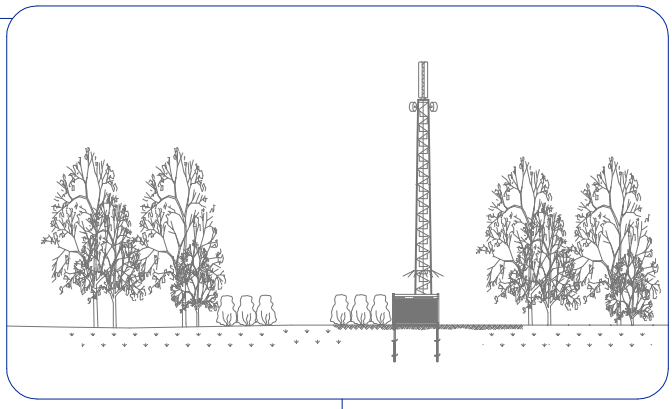
The AlanDick Screwpile solution has been developed to provide a `quick to erect` modular solution for smaller cellular sites;
The steelwork grillage assembly is designed to be installed, rigged and `on air` within 2 to 3 days.
A range of structure types and heights can be accommodated; Screwpile grillages are designed to accept the following:

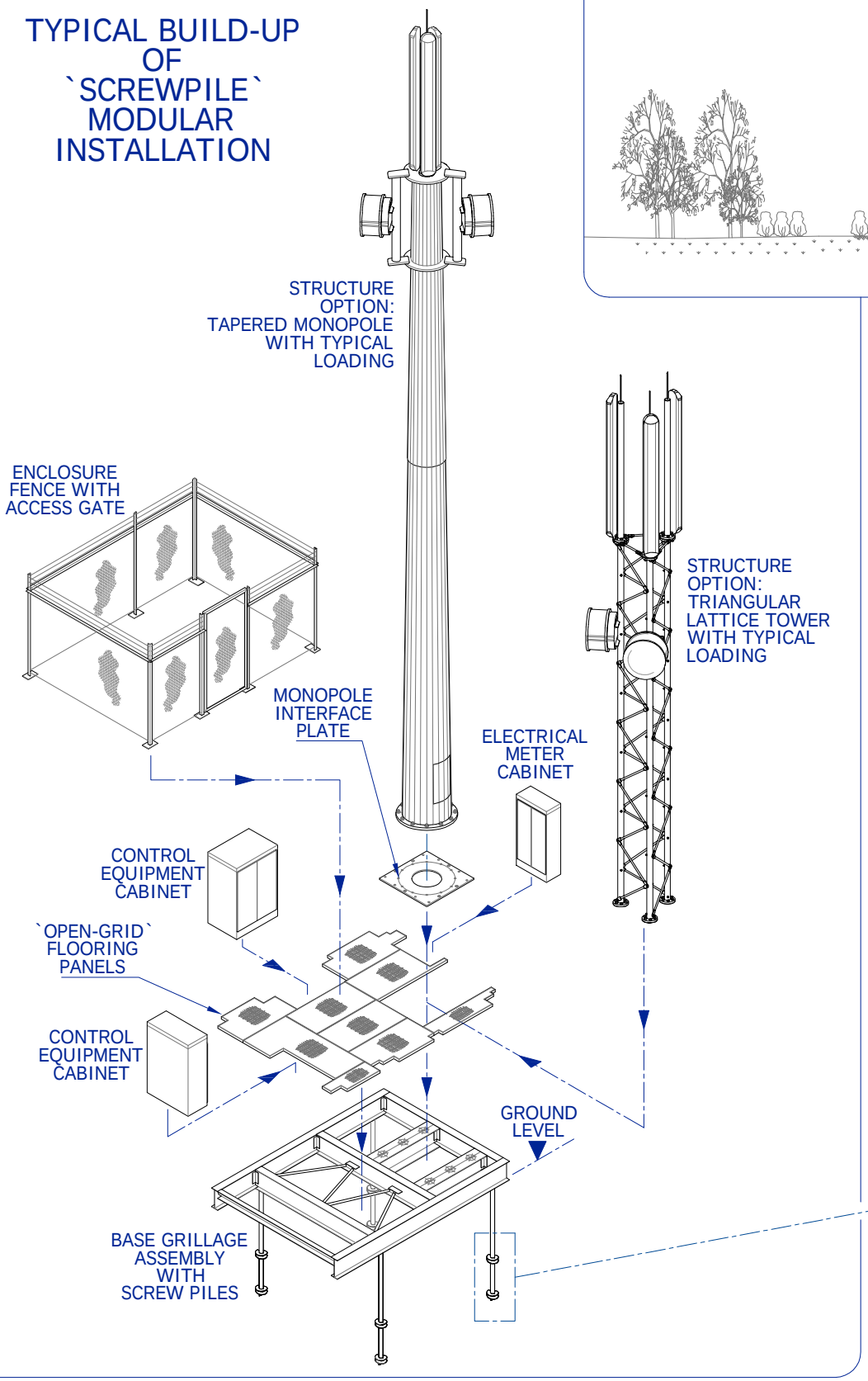
- AD703 Lattice towers - up to 20m in height
- AD1003 Lattice towers - up to 22.5m in height
- Slimline monopole structures - up to 22.5m in height

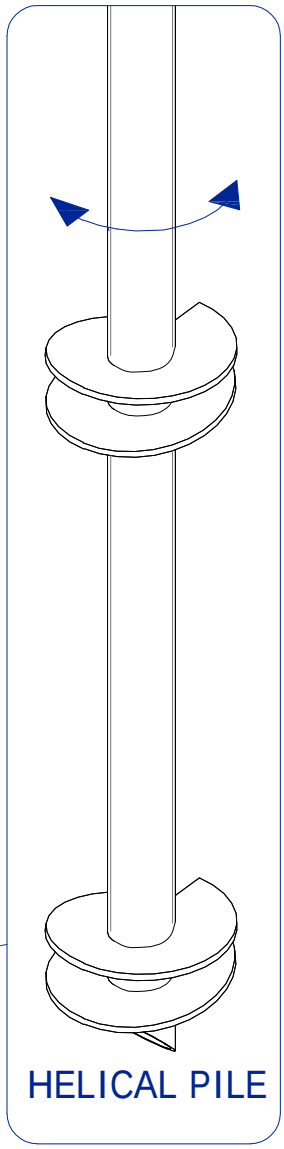
STRUCTURES DATASHEET

SCREWPILE SITES - Product Overview

TYPICAL BUILD-UP OF `SCREWPILE` MODULAR INSTALLATION



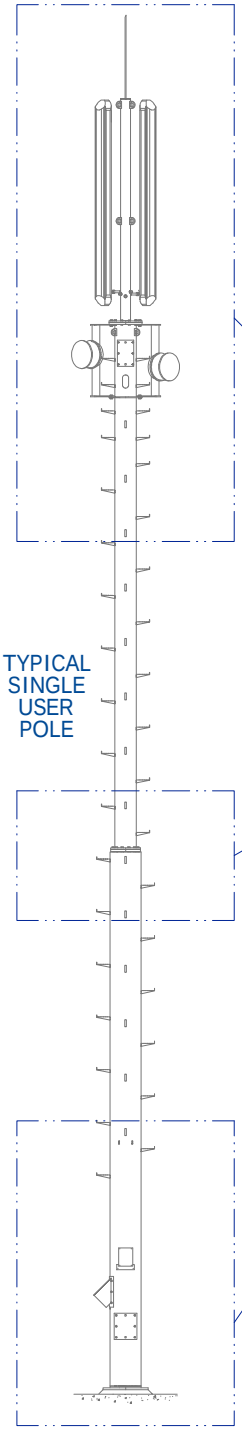


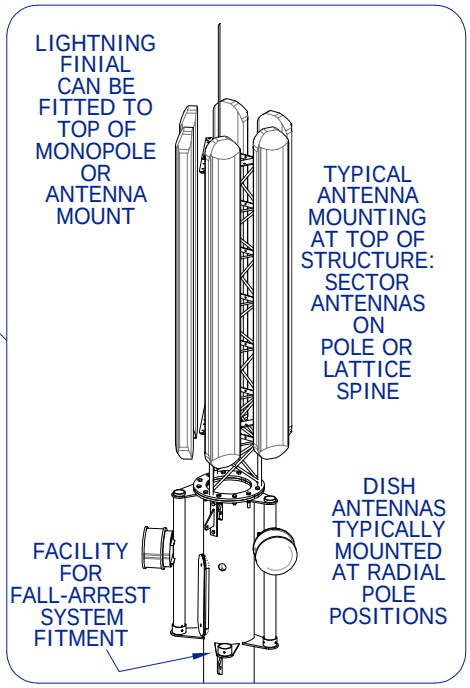


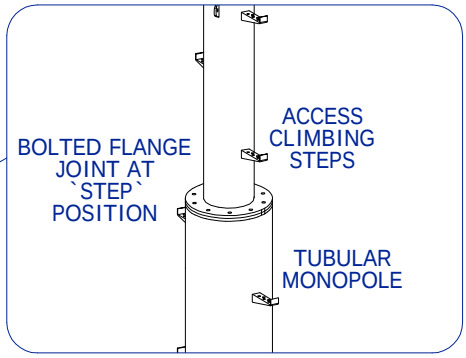
HELICAL PILE

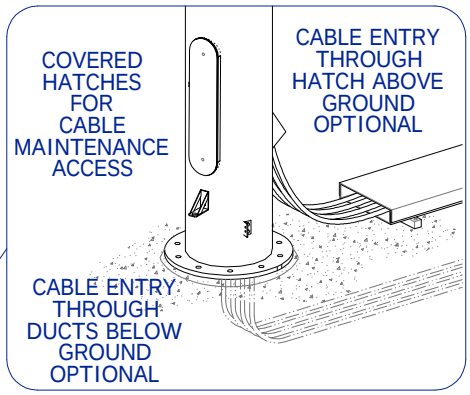
STRUCTURES DATASHEET

TUBULAR MONOPOLES - Overview









STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	MONOPOLE
MAIN APPLICATION	CELLULAR & LIGHT MICROWAVE
PLAN SHAPE	ROUND
ELEVATION SHAPE	STEPPED
MAXIMUM BUILD HEIGHT	30m GENERALLY / 45m MAXIMUM
FACEWIDTH	VARIOUS
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	EXTERNAL LADDER / CLIMB RUNGS
POLE CONSTRUCTION	WELDED TUBE
BRACE SECTION	N/A
DESIGN STEEL GRADE	S275 OR EQUIVALENT
TYPICAL LOADING	SINGLE or MULTI-USER CELLULAR / LIGHT MICROWAVE
UTILISED DESIGN CODES	CP3, BS.8100, EIA
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Low visual impact due to smooth, feature-free construction

High windspeed/loading ratio

Discreet but accessible internal feeder cable management

Quick to erect

PRODUCT DESCRIPTION

AlanDick tubular monopole structures are a low-profile alternative to traditional lattice towers and masts.

Developed primarily as a low visual impact solution for the worldwide cellular market, this type of structure is ideally suited to carry Cross-Polar Antennas. Furthermore, designs also accommodate deflection criteria suitable for microwave links.
Structures are fully galvanised, including internal surfaces of tubular poles.
A comprehensive range of ancillary products is available for fitment to these structures, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas. Cable management is invariably internal, reducing visual impact and wind area, and protecting cables and equipment.
Monopoles have proved to be popular with planning authorities, and continue to be employed on a widespread basis by worldwide cellular networks.

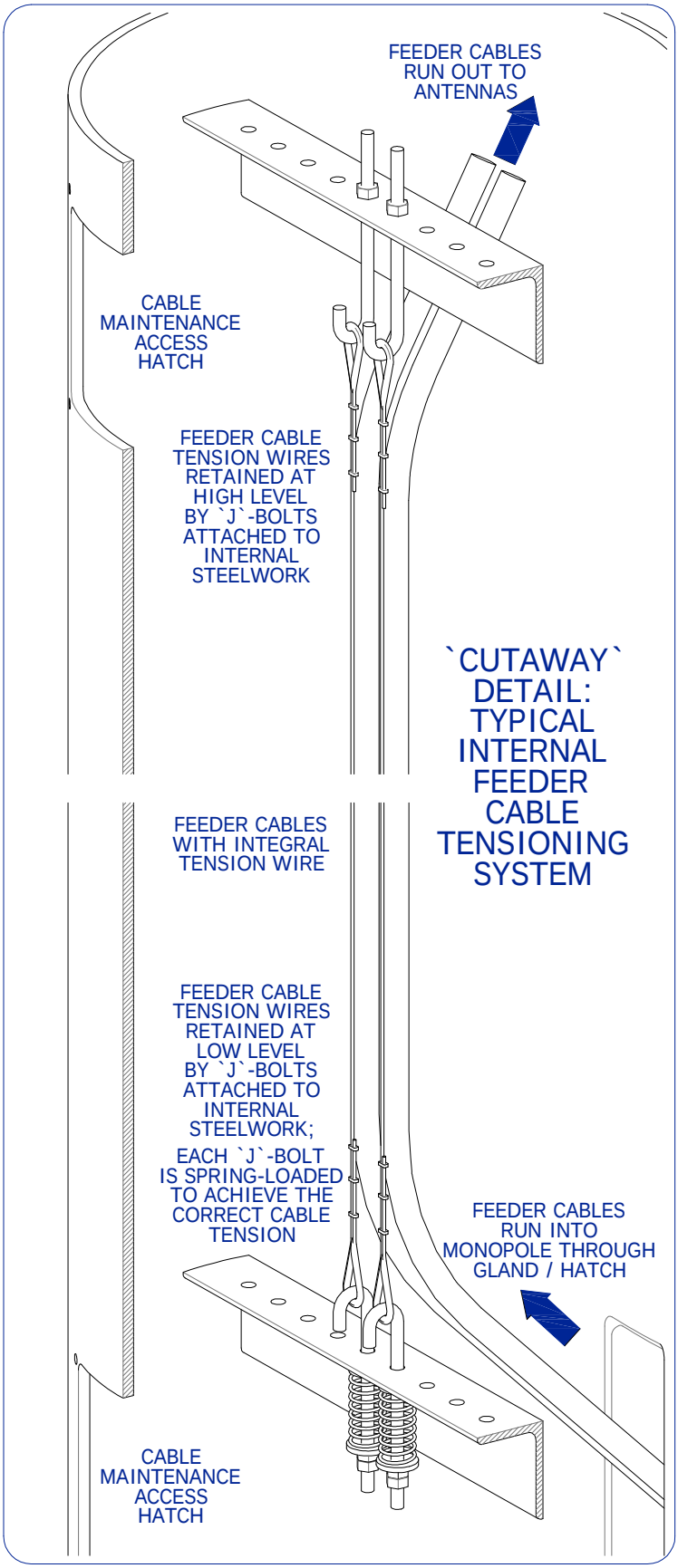
Datasheet Number SDS_MONO_002 Rev.A

STRUCTURES DATASHEET

TUBULAR MONOPOLES - Range

LARGE STEPPED TUBULAR MONOPOLE WITH SURMOUNTED ANTENNA FRAME, EXTERNAL LADDER & ANTI-CLIMB ARRAY

TYPICAL LOADING ON 2-USER MONOPOLE: SHOWING SECTOR ANTENNAS, DISHES AND AMPLIFIER UNITS

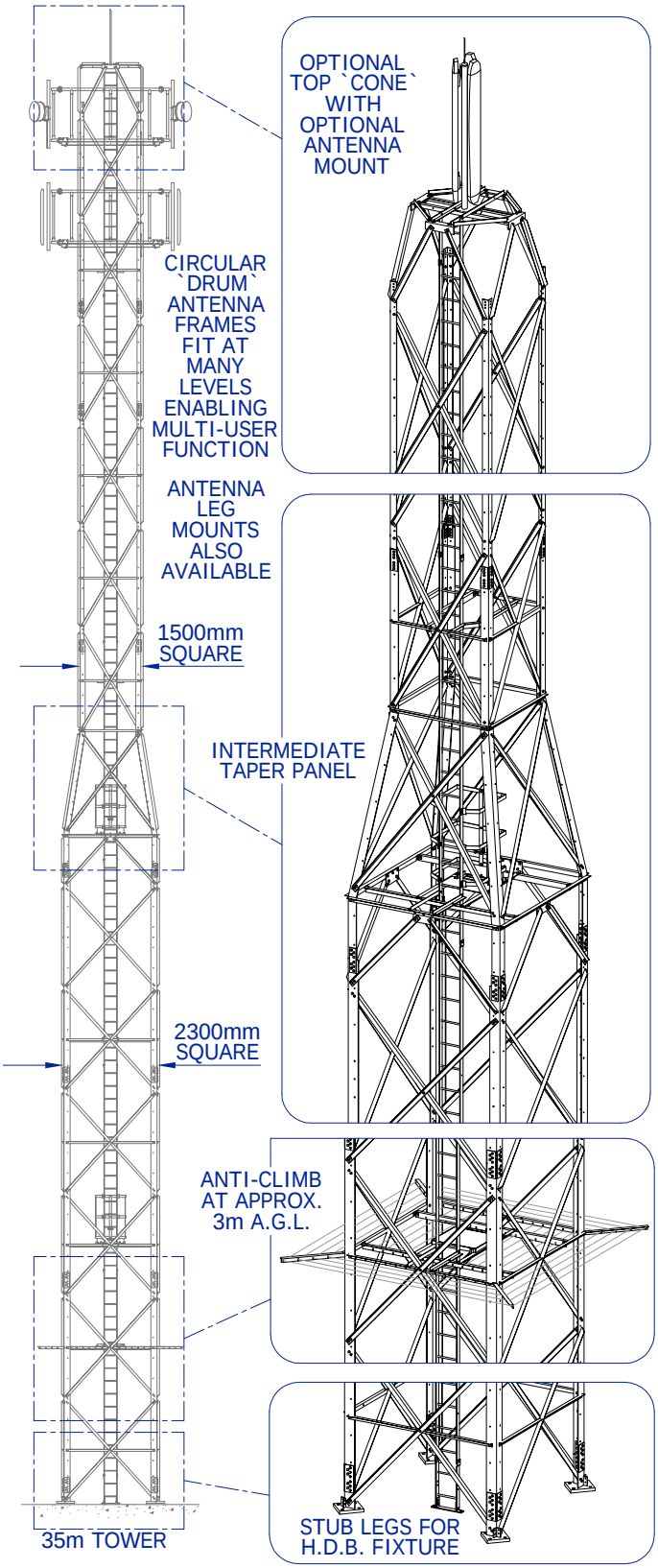


`CUTAWAY` DETAIL: TYPICAL INTERNAL FEEDER CABLE TENSIONING SYSTEM

Datasheet Number SDS_MONO_002 Rev.A

STRUCTURES DATASHEET

SSPP TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	SQUARE
ELEVATION SHAPE	STEPPED PARALLEL
MAXIMUM BUILD HEIGHT	35m
FACEWIDTH	TOP = 1500mm, BASE = 2300mm
PLATFORM SPACING	CUSTOMER OPTION
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	MULTI-USER CELLULAR (DISHES & GSM on ANTENNA FRAMES)
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Upgradeable tower available in height range 15m to 35m

Flexible antenna mountings

Multiple `drum` antenna frame positions give multi-user functionality

Safe working and maintenance environment

PRODUCT DESCRIPTION

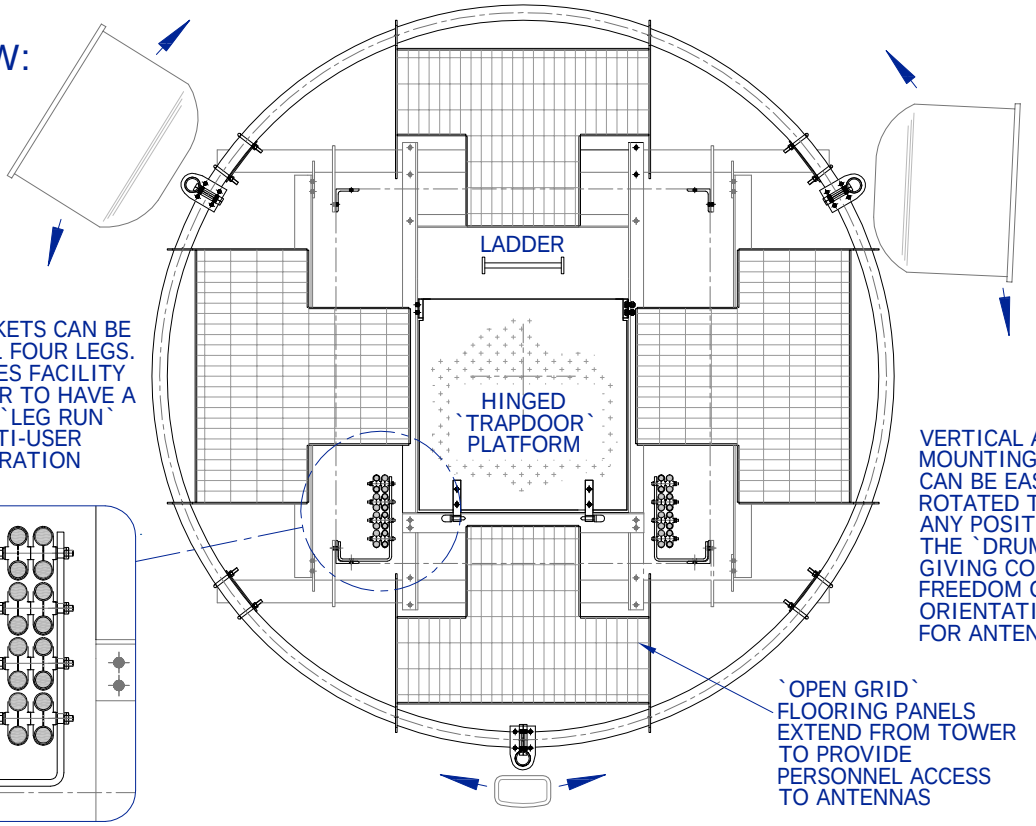
The SSPP tower range has been designed specifically for operators demanding a high specification product with upgradeable capacity.
The versatile `drum` antenna frames can be fitted at multiple positions, giving multi-user functionality whilst retaining a slim profile.
A range of antenna leg mounts and tower top antenna poles are also available.
Leg-mounted feeder management can be segragated between operators in order to attain easy installation and maintenance.

Datasheet Number SDS_SSPP_001 Rev.B

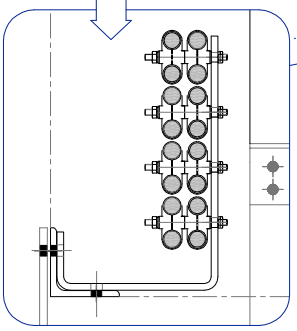
STRUCTURES DATASHEET

SSPP TOWER - Features

PLAN VIEW: `DRUM` ANTENNA FRAME

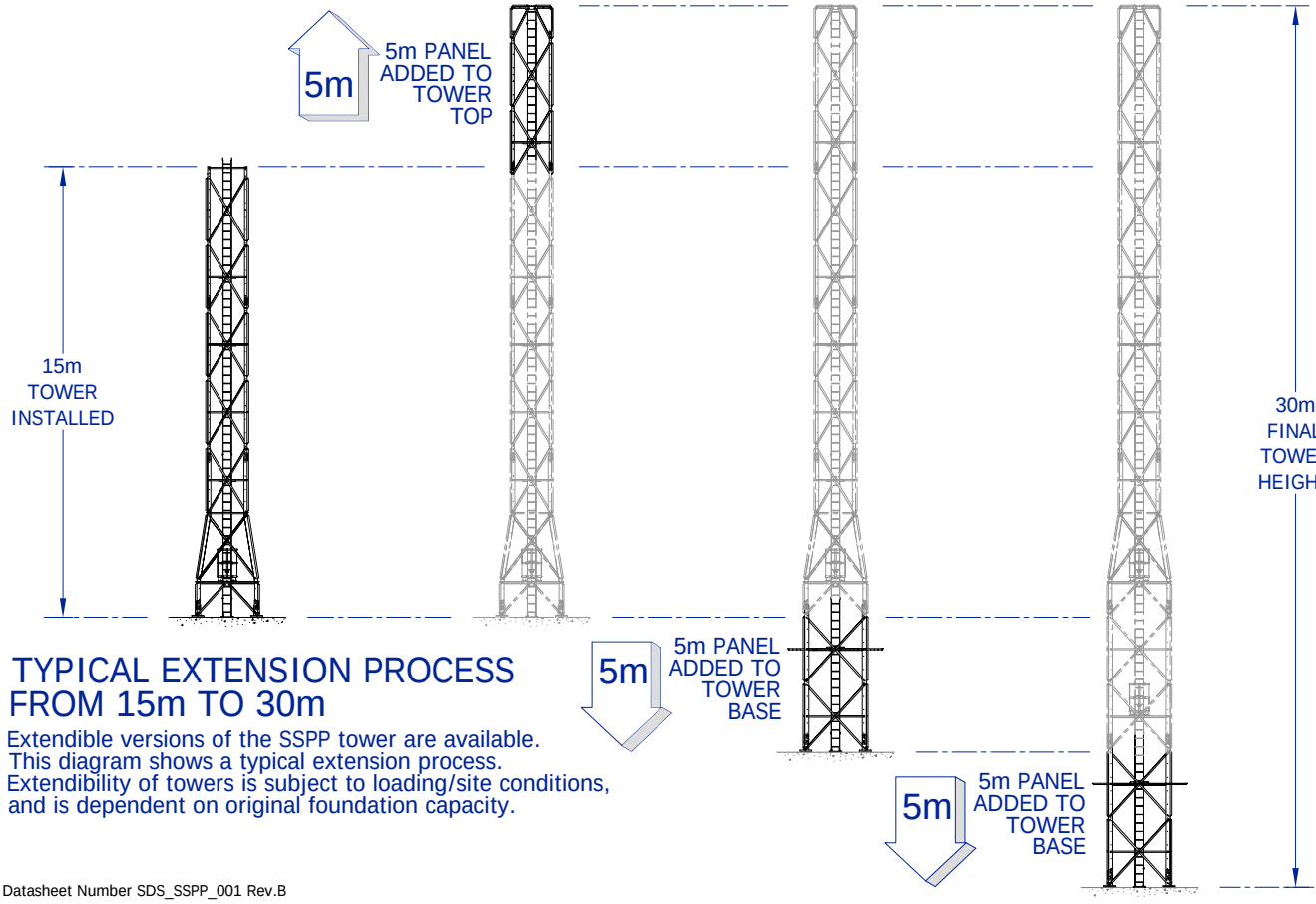


FEEDER BRACKETS CAN BE FITTED TO ALL FOUR LEGS. THIS PROVIDES FACILITY FOR EACH USER TO HAVE A DEDICATED `LEG RUN` IN A MULTI-USER CONFIGURATION



VERTICAL ANTENNA MOUNTING POLES CAN BE EASILY ROTATED TO ANY POSITION AROUND THE `DRUM` DIAMETER, GIVING COMPLETE FREEDOM OF ORIENTATION FOR ANTENNAS

`OPEN GRID` FLOORING PANELS EXTEND FROM TOWER TO PROVIDE PERSONNEL ACCESS TO ANTENNAS



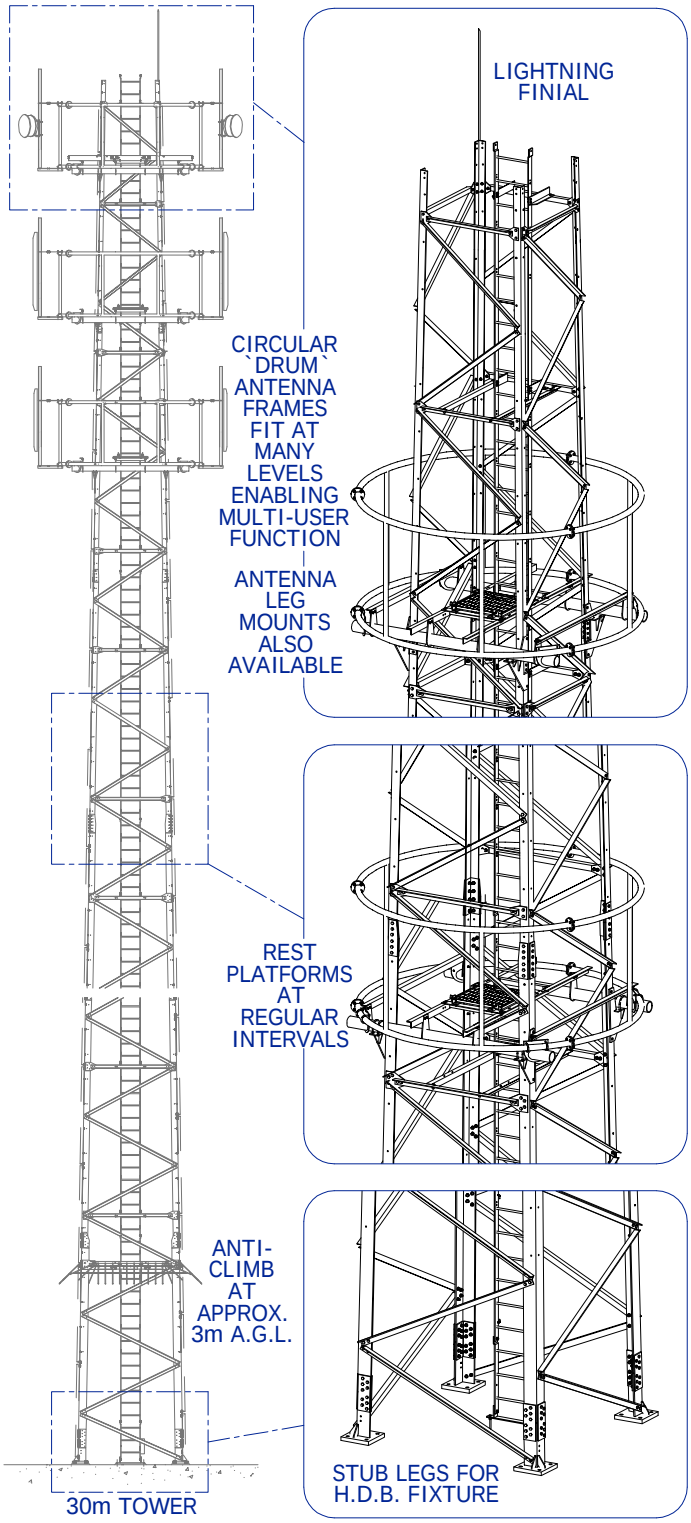
TYPICAL EXTENSION PROCESS FROM 15m TO 30m

Extendible versions of the SSPP tower are available.
This diagram shows a typical extension process.
Extendibility of towers is subject to loading/site conditions, and is dependent on original foundation capacity.

Datasheet Number SDS_SSPP_001 Rev.B

STRUCTURES DATASHEET

SSTT TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	SQUARE
ELEVATION SHAPE	TAPERED
MAXIMUM BUILD HEIGHT	30m
FACEWIDTH	TOP = 1180mm, BASE = 2140mm (30m TOWER)
PLATFORM SPACING	AT `DRUM` LEVELS
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	MULTI-USER CELLULAR (DISHES & GSM on ANTENNA FRAMES)
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Upgradeable tower available in height range 15m to 30m

Flexible antenna mountings

Multiple `drum` antenna frame positions give multi-user functionality

Safe working and maintenance environment

Slim profile is favoured by planning authorities

PRODUCT DESCRIPTION

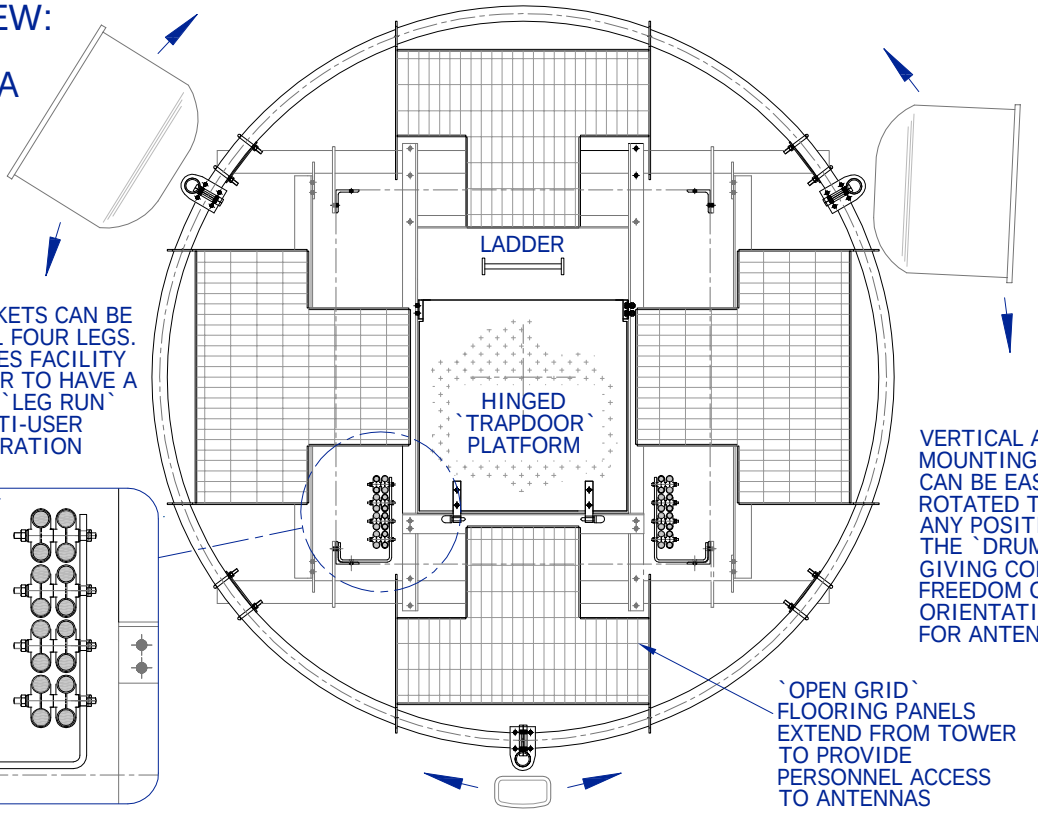
The SSTT tower range has been designed specifically for multi-user operation whilst maintaining a slim profile and upgradeable capacity.
The versatile `drum` antenna frames can be fitted at multiple positions, giving multi-user functionality whilst retaining a slim profile.
Leg-mounted feeder management can be segragated between operators in order to attain easy installation and maintenance.
The structure is fully galvanised. Panel modules are 5 metres in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.
The SSTT has proved to be popular with planning authorities, and continues to be employed on a widespread basis by cellular networks.

Datasheet Number SDS_SSTT_001 Rev.B

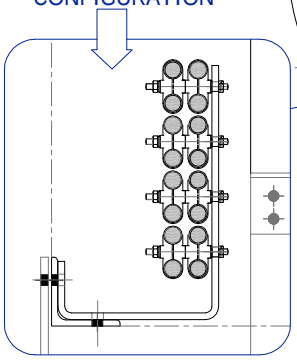
STRUCTURES DATASHEET

SSTT TOWER - Features

PLAN VIEW: `DRUM` ANTENNA FRAME

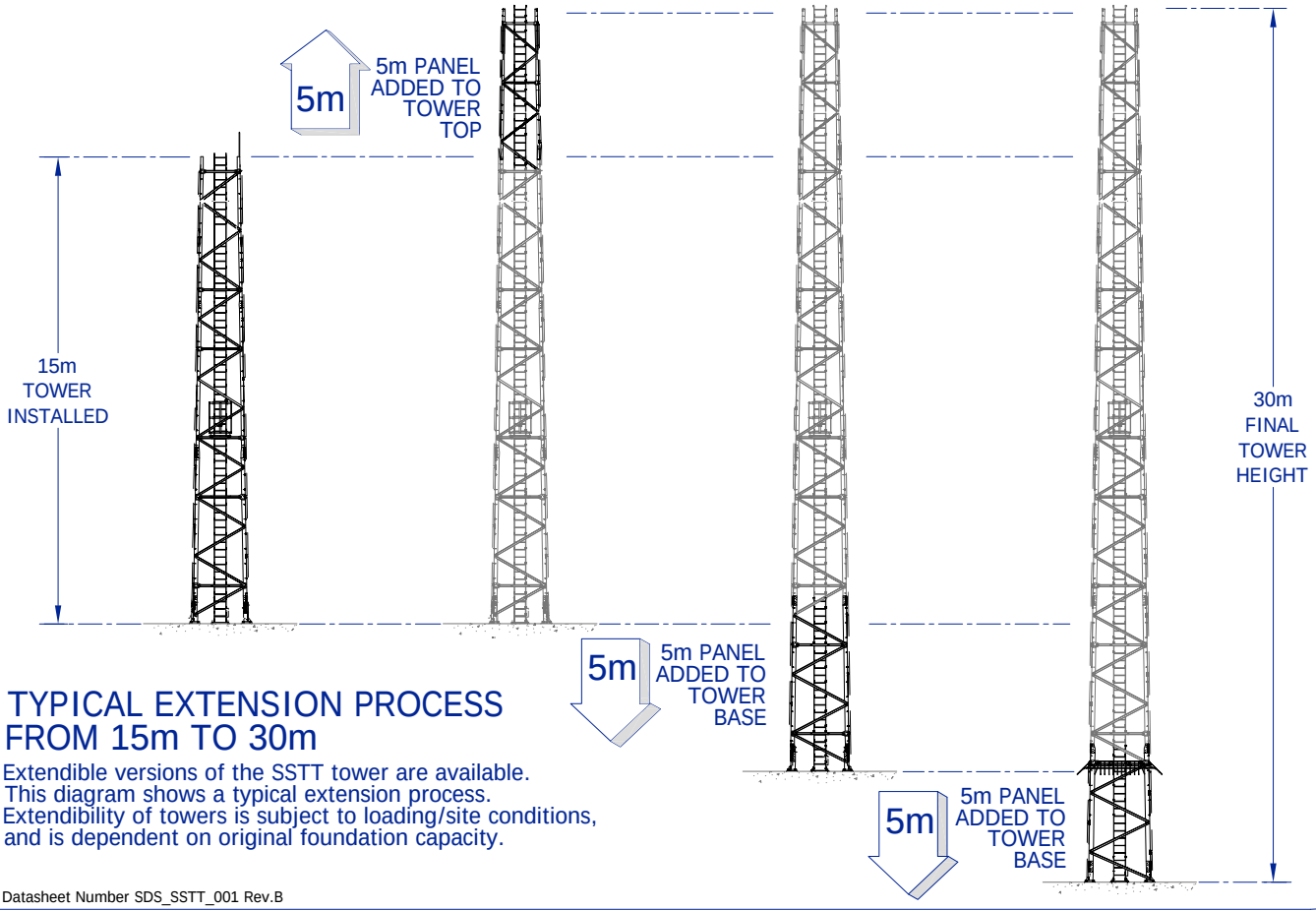


FEEDER BRACKETS CAN BE FITTED TO ALL FOUR LEGS. THIS PROVIDES FACILITY FOR EACH USER TO HAVE A DEDICATED `LEG RUN` IN A MULTI-USER CONFIGURATION



VERTICAL ANTENNA MOUNTING POLES CAN BE EASILY ROTATED TO ANY POSITION AROUND THE `DRUM` DIAMETER, GIVING COMPLETE FREEDOM OF ORIENTATION FOR ANTENNAS

`OPEN GRID` FLOORING PANELS EXTEND FROM TOWER TO PROVIDE PERSONNEL ACCESS TO ANTENNAS



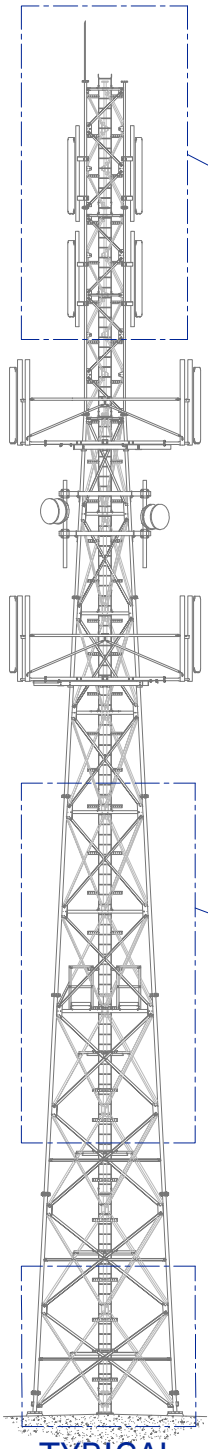
TYPICAL EXTENSION PROCESS FROM 15m TO 30m

Extendible versions of the SSTT tower are available.
This diagram shows a typical extension process.
Extendibility of towers is subject to loading/site conditions, and is dependent on original foundation capacity.

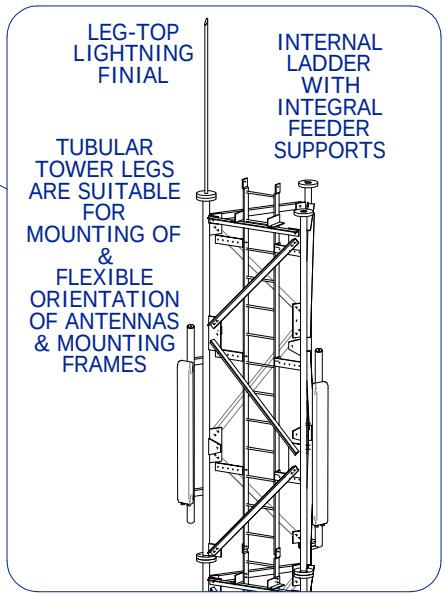
Datasheet Number SDS_SSTT_001 Rev.B

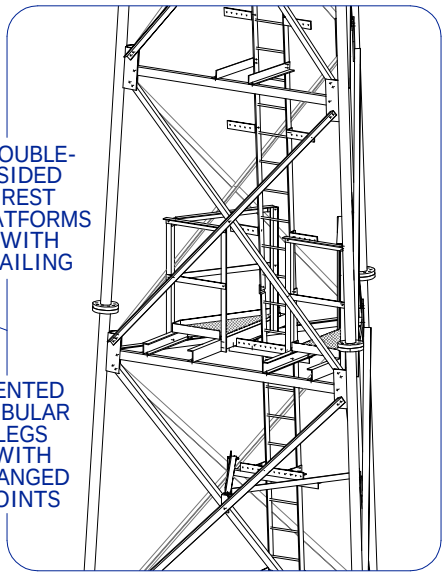
STRUCTURES DATASHEET

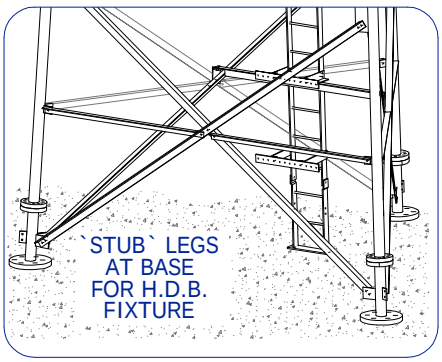
STPT TOWER - Product Overview



TYPICAL STPT TOWER & LOADING







STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR / MICROWAVE / LIGHT BROADCAST
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	TAPERED / PARALLEL TOP
MAXIMUM BUILD HEIGHT	45m
FACEWIDTH	980mm TOP, 5050mm BASE
PLATFORM SPACING	CUSTOMER OPTION
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	TUBE
BRACE SECTION	ANGLE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	MULTI-USER CELLULAR / MICROWAVE or LIGHT BROADCAST
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Aesthetic low-wind area structure - Ideal for cellular siteshare or microwave applications

Favoured by planning authorities, as the triangular construction facilitates a slim profile in relation to tower height and load capacity.

High loading capacity for size

Tubular legs facilitate direct mounting of antennas - No specialised mounting steelwork required

PRODUCT DESCRIPTION

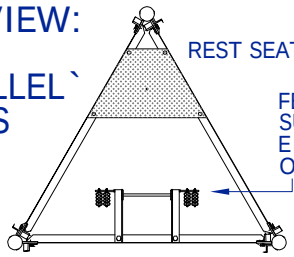
The STPT tower range has been developed primarily as a multi-user tower for cellular applications. However it is also well suited to microwave or light broadcast use. Its` triangular construction facititates both low wind area and low visual impact, whilst allowing high loading configurations. Tubular legs can provide facility for mounting antennas directly, without requirement for traditional mounting poles and brackets.

The structure is fully galvanised, including the internal surfaces of its tubular members. Standard panel modules are 5m in height. A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems, additional feeder supports and alternative mounts for all types of cellular antennas.

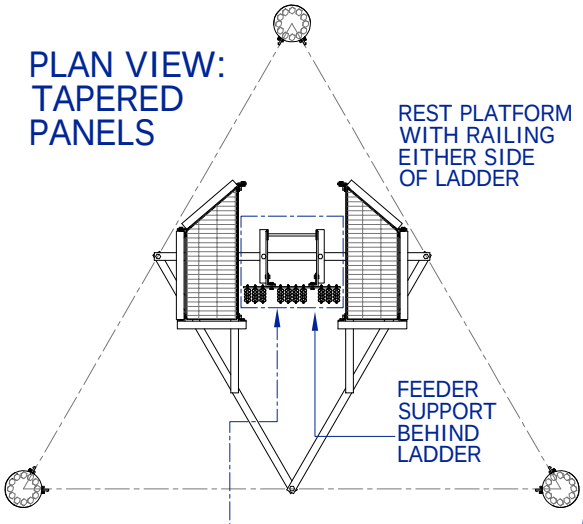
STRUCTURES DATASHEET

STPT TOWER - Features

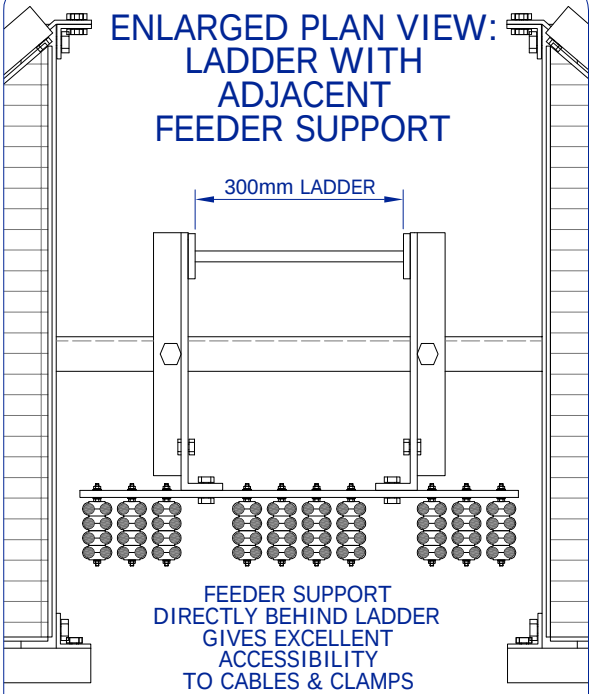
PLAN VIEW: TOP `PARALLEL` PANELS



PLAN VIEW: TAPERED PANELS



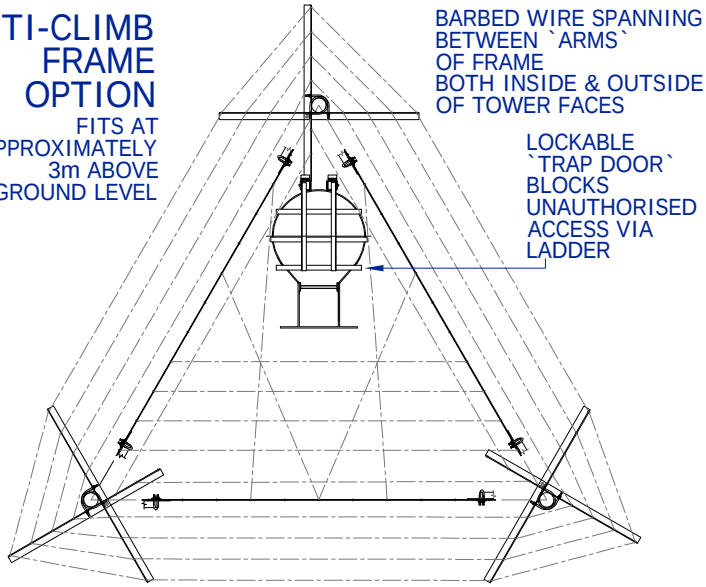
ENLARGED PLAN VIEW: LADDER WITH ADJACENT FEEDER SUPPORT



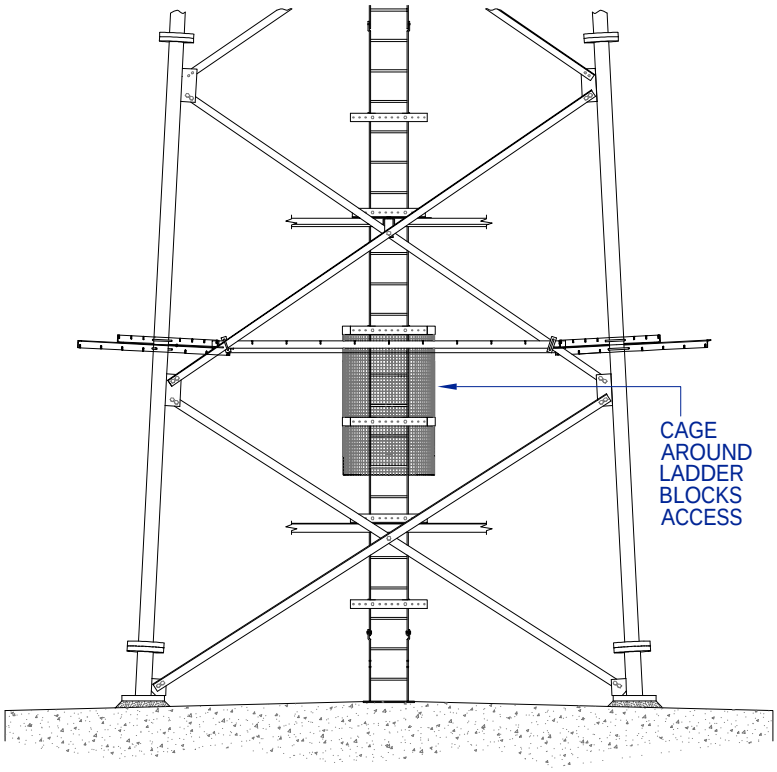
FEEDER SUPPORT DIRECTLY BEHIND LADDER GIVES EXCELLENT ACCESSIBILITY TO CABLES & CLAMPS

ANTI-CLIMB FRAME OPTION

FITS AT APPROXIMATELY 3m ABOVE GROUND LEVEL



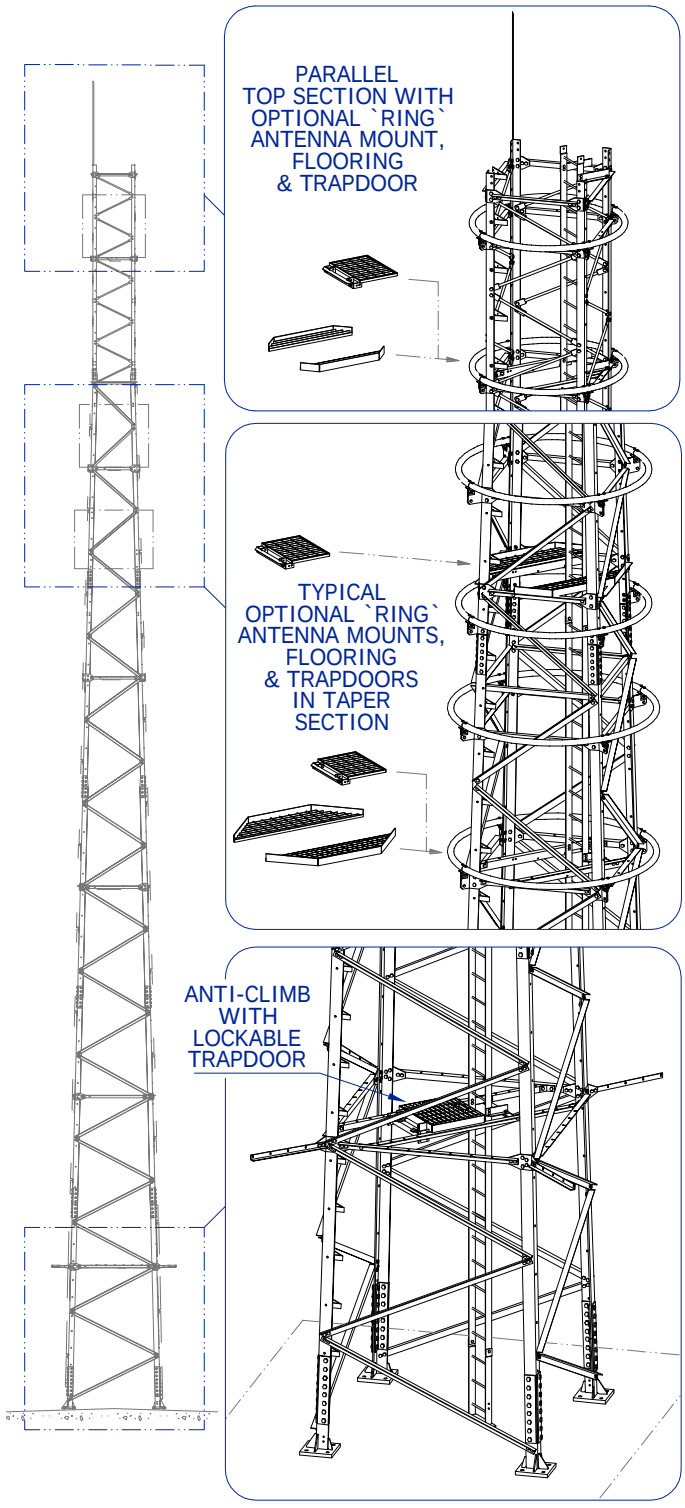
PLAN ON TOWER WITH ANTI-CLIMB FRAME



ELEVATION ON TOWER BASE WITH ANTI-CLIMB FRAME

STRUCTURES DATASHEET

SSU TOWER - Product Overview



STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	SQUARE
ELEVATION SHAPE	TAPERED (WITH PARALLEL TOP)
MAXIMUM BUILD HEIGHT	35m
FACEWIDTH	TOP = 1000mm, BASE = 2213mm
PLATFORM SPACING	CUSTOMER OPTION
ACCESS CONFIGURATION	INTERNAL LADDER
LEG SECTION	ANGLE
BRACE SECTION	ANGLE and ROD
DESIGN STEEL GRADE	S275 OR EQIVALENT
SITESHARE OPTION	YES
UTILISED DESIGN CODES	BS.8100
MIN. GBP REQUIREMENT	TO SITE REQUIREMENT
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Slim profile

High loading capacity to size ratio

Versatile, wind-efficient antenna mount kits

Versatile platform kits

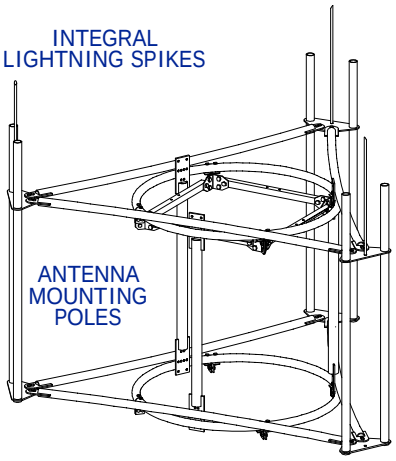
PRODUCT DESCRIPTION

The SSU has been designed as a low-visibility structure for cellular operators.
Tower panels, platform flooring, trapdoors and `ring` antenna mounts are supplied in modular form which allows customers to customise the tower features in many configurations.
A unique feature of the SSU is its integral `ring` antenna mounts. These fit tightly to the structure at pre-designated heights, giving multiple options for siteshare loads, full 360° rotatability of sector and dish antennas, and keeping the overall profile of the structure to an absolute minimum. An additional `Delta-frame` option is available for fitting to the ring mounts where spacial diversity of antennas required.

Datasheet Number SDS_SSU_001 Rev.B

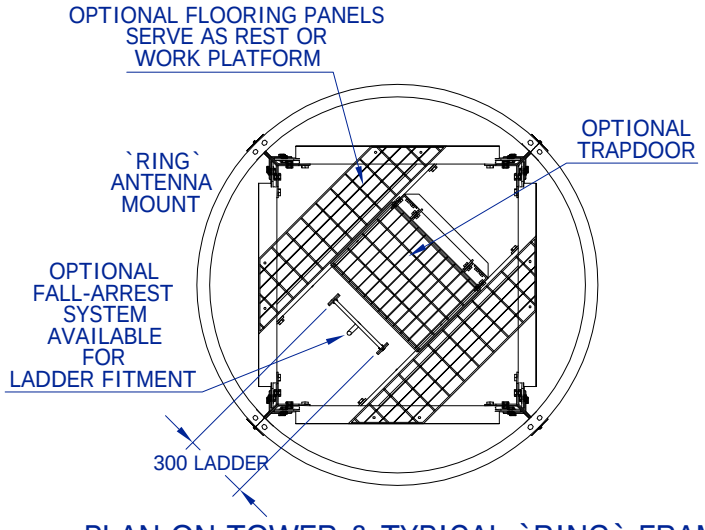
STRUCTURES DATASHEET

SSU TOWER - Features



DELTA-FRAME OPTION FOR 6-SECTOR ANTENNA ARRAY

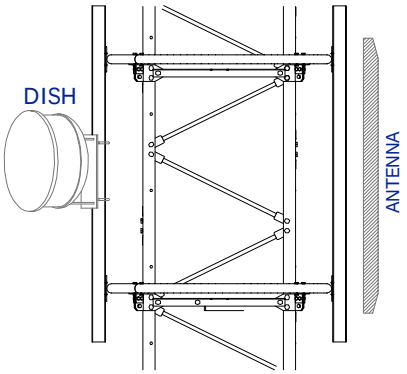
FRAME CLAMPED TO RINGS



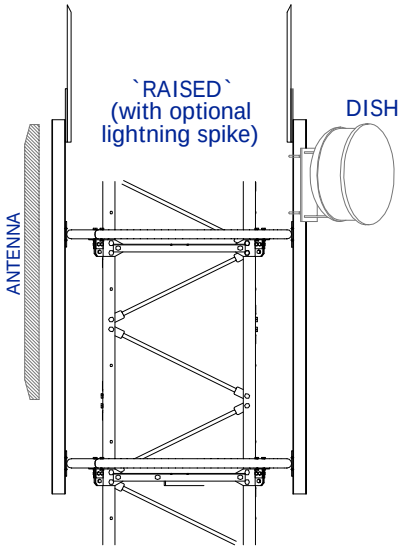
PLAN ON TOWER & TYPICAL `RING` FRAME

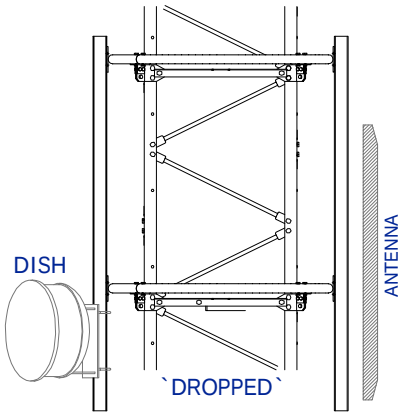
ANTENNA POLE OPTIONS AVAILABLE FOR `RING` ANTENNA MOUNTS

ANTENNA POLES CLAMPED TO RINGS

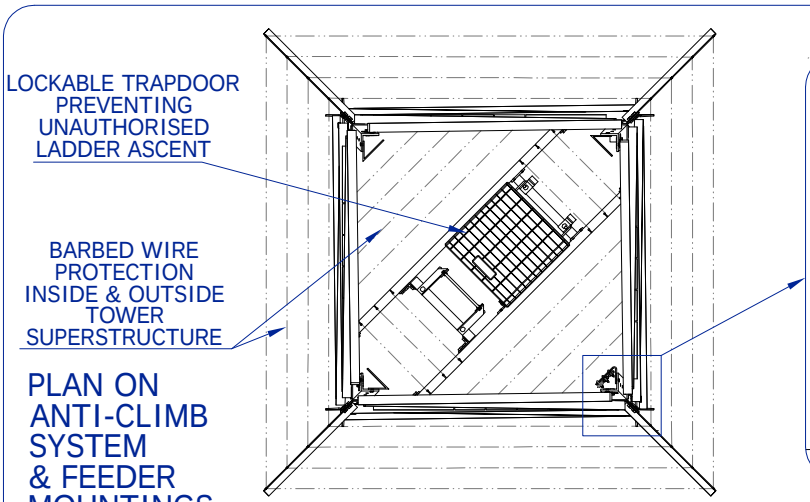


CENTRALLY MOUNTED

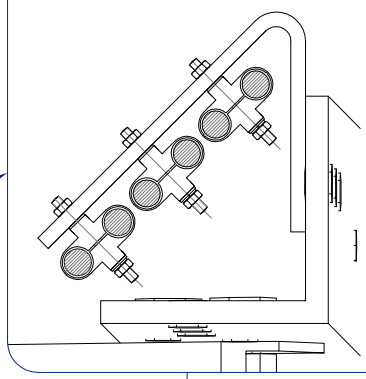




`DROPPED`



PLAN ON ANTI-CLIMB SYSTEM & FEEDER MOUNTINGS

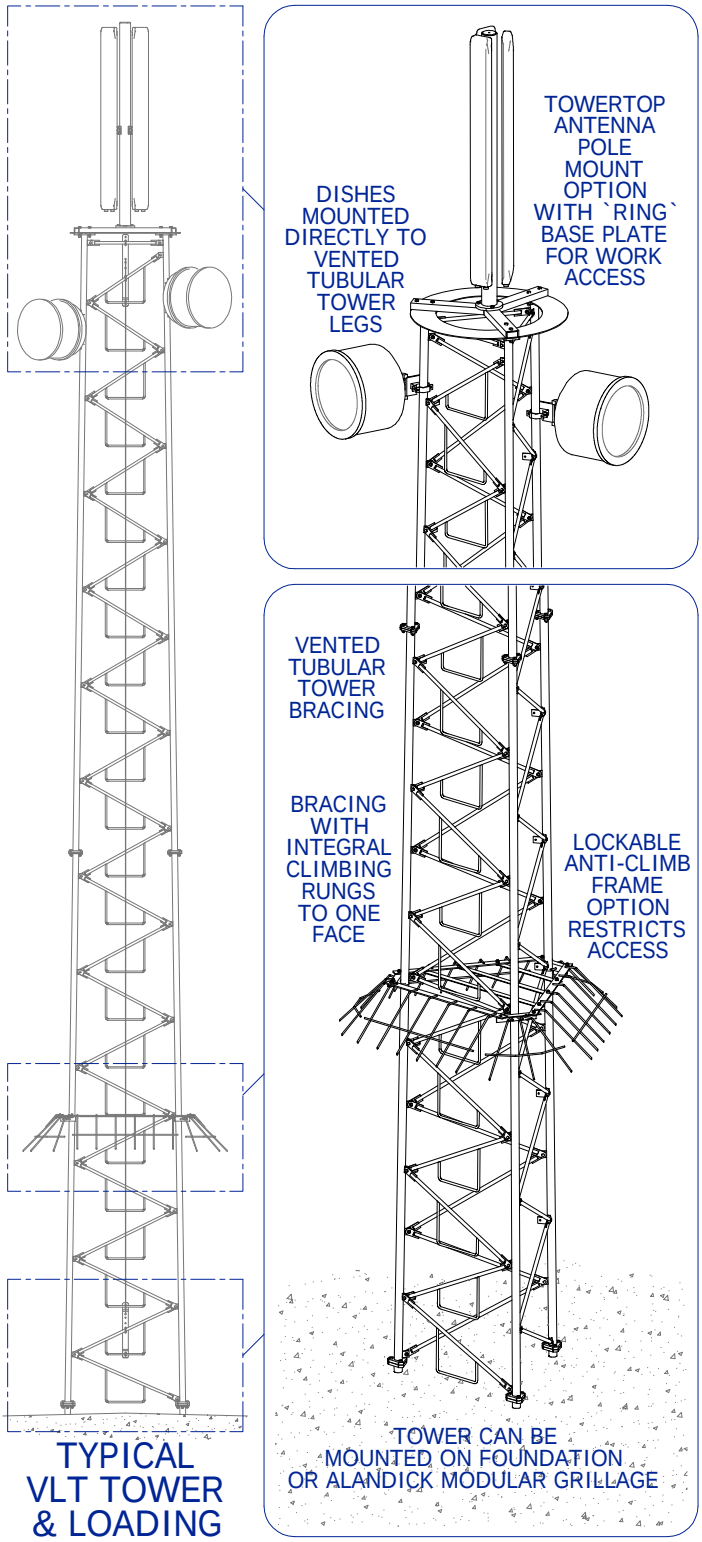


FEEDER BRACKETS MOUNTED FROM ALL FOUR LEGS HOLD CABLES TIGHT INTO CORNERS. THIS PROVIDES FACILITY FOR EACH USER TO HAVE A DEDICATED LEG RUN IN A TYPICAL 4-USER CONFIGURATION

Datasheet Number SDS_SSU_001 Rev.B

STRUCTURES DATASHEET

VLT TOWER - Product Overview



TYPICAL VLT TOWER & LOADING

STRUCTURE TECHNICAL SUMMARY

CLASSIFICATION	TOWER
MAIN APPLICATION	CELLULAR
PLAN SHAPE	TRIANGULAR
ELEVATION SHAPE	TAPERED
MAXIMUM BUILD HEIGHT	20m
FACEWIDTH	643mm TOP (20m TOWER), 1200mm BASE
PLATFORM SPACING	N/A
ACCESS CONFIGURATION	FACE CLIMBING RUNGS
LEG SECTION	TUBE
BRACE SECTION	TUBE
DESIGN STEEL GRADE	S275 & S355 OR EQUIVALENT
SITESHARE OPTION	NO
UTILISED DESIGN CODES	BS.8100
TYPICAL LOADING	SINGLE-USER CELLULAR
FINISH	GALVANISED TO BS.EN.ISO.1461

ATTRIBUTES

Extremely lightweight efficient design for single-user applications

Slim profile gives low visual impact

Easy to transport and erect

Ideal for installation on AlanDick modular base grillage units

PRODUCT DESCRIPTION

The AlanDick VLT is a low-profile triangular lattice tower developed primarily as a low visual impact solution for cellular markets.
It provides an economic solution for single-user aplications, and has the valuable abilty to fit to AlanDick`s rapid deployment modular grillages;
The combination of a `no concrete` modular base and quick-build tower gives significant reduction in `time-to-air`.
The structure is fully galvanised, including the internal surfaces of its tubular steel legs. Panel modules range from 2.7m to 6m in height.
A comprehensive range of ancillary products is available for fitment to this structure, including anti-climb devices, fall-arrest devices, lightning protection systems and mounts for all types of cellular antennas.

Datasheet Number SDS_VLT_001 Rev.A

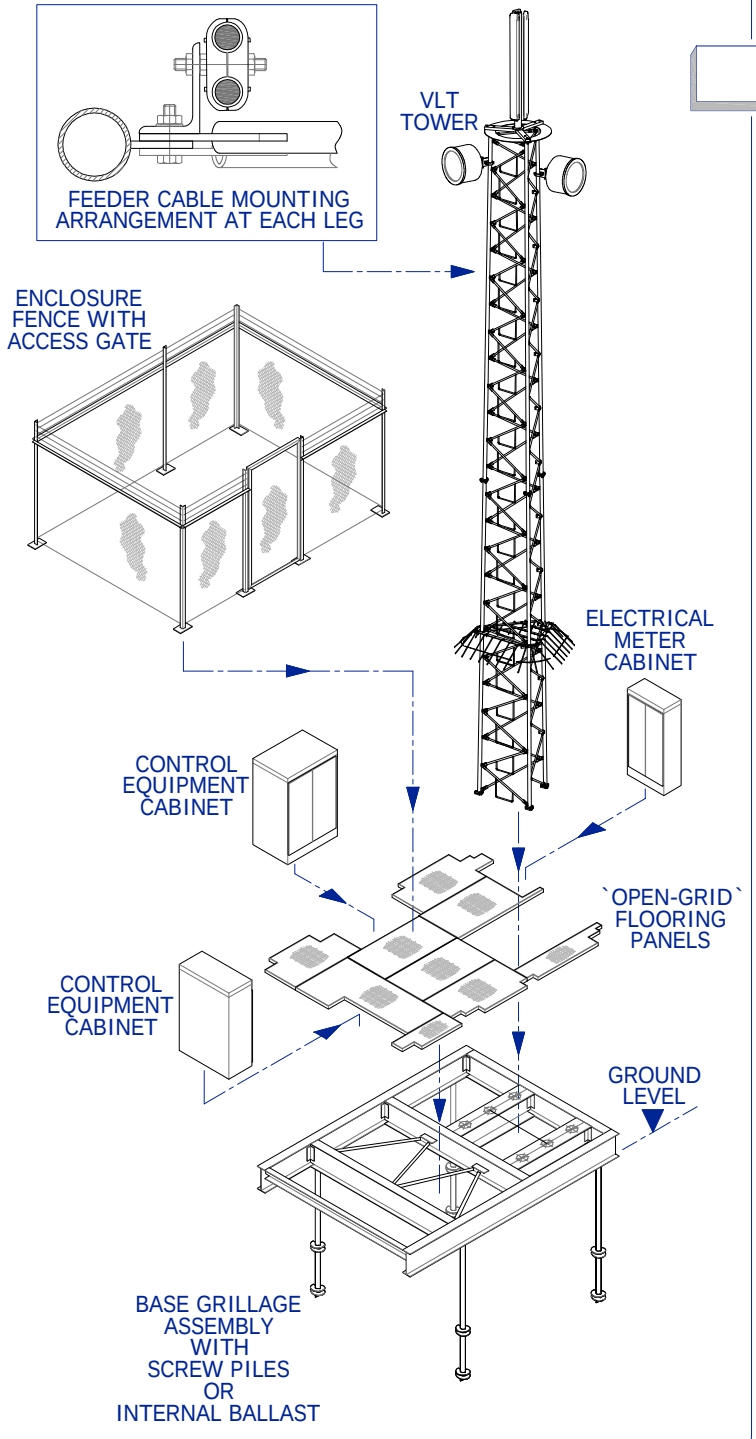
STRUCTURES DATASHEET

VLT TOWER - Features

VLT TOWER & ALANDICK MODULAR INSTALLATION

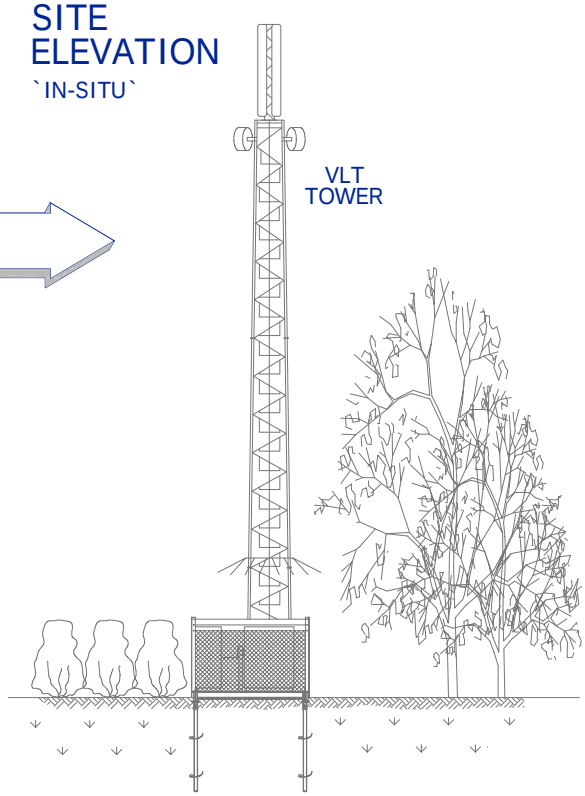
SHOWN HERE IS A TYPICAL CONFIGURATION OF MODULAR SITE COMPONENTS

FEEDER CABLE MOUNTING ARRANGEMENT AT EACH LEG



VLT MODULAR SITE ELEVATION

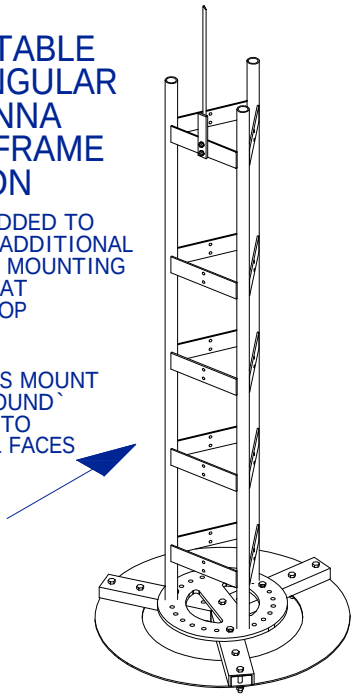
`IN-SITU`



ROTATABLE TRIANGULAR ANTENNA HEADFRAME OPTION

CAN BE ADDED TO PROVIDE ADDITIONAL ANTENNA MOUNTING FACILITY AT TOWER TOP

ANTENNAS MOUNT IN `3-AROUND` PATTERN TO VERTICAL FACES



Datasheet Number SDS_VLT_001 Rev.A