



300' 3600SRWD
300' 3600SRWD Guyed Tower, IN
15-6503-MEG Option I

SABRE MODEL 3600SRWD GUYED TOWER

Quantity of one (1) 300' Sabre Model 3600SRWD guyed tower.

The tower will be triangular in design 3' - 0" on a face and consisting of all solid welded 20' sections. Tower will have one (1) anchor in each direction, at 0°, 120° and 240°, with an 80% level guy radius. The tower will be designed for a basic wind speed of 90 mph with 0" of radial ice, and 40 mph with 1" of radial ice, in accordance with ANSI/TIA-222-G.

Revision G Parameters:

- Structure Class III
- Exposure Category C
- Topographic Category 1

ITEM I TOWER MATERIALS \$47,546.00

Materials to be provided include:

Complete tower steel and hardware

Complete guying system

Base material and standard deadman anchor arms (see notes)

Climbing ladder incorporated into one (1) face

Waveguide support ladder incorporated into three (3) faces (to support up to thirty-six (36) lines)

Required stabilizers

Required lighting mounts

Safety climb without harness (300')

Motorola R56 grounding

One (1) 8' x 3/4" lightning rod copper clad and stiffener

P.E. certified tower profile and foundation drawings

Final erection drawings

ITEM II LIGHTING SYSTEM \$15,373.00

One (1) Flash (E1) Dual light system with white strobe, LED beacon and sidelights with strobe cable and SO cord (200' - 350') (C30045003) designed in accordance with FAA and FCC specifications.



OPTIONS:

Two (2) 6' Sidearms each with one (1) Tieback Kit for the 284' Elevation.....	\$ 960.00
Two (2) 6' Sidearms each with one (1) Tieback Kit for the 264' Elevation.....	\$ 961.00
One (1) 6' Sidearm with one (1) Tieback Kit for the 264' Elevation.....	\$ 506.00
One (1) 4-1/2" O.D. Leg Dish Mount for the 210' Elevation	\$ 272.00
One (1) 4-1/2" O.D. Leg Dish Mount for the 160' Elevation	\$ 272.00
Two (2) 3' Sidearms each with one (1) Tieback Kit for the 35' Elevation	\$ 776.00
Waveguide Bridge 2-Leg 2' x 10' (15' Direct Burial) with Three (3) 3 Level Trapeze Kits (each)...	\$ 779.00

Classification of Structure:

- Class Three - Structures used primarily for essential communications such as: civil or national defense, emergency, rescue or other disaster operations, military and navigation facilities.

Exposure Categories:

- Exposure C - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat, open country, grasslands and shorelines in hurricane prone regions. ***Exposure C is the standard default for exposure categories.***

Topographic Categories:

- Category 1- No abrupt changes in general topography, e.g. flat or rolling, no wind speed-up consideration shall be required. ***Category one is the standard default for the topographic categories.***

The permit package includes a profile drawing of the structure with member sizes; anchor details; descriptive notes; structural calculations; a table of supported antennas, mounts and feedlines; and a foundation sketch and calculations (if applicable).

This information is based on ANSI/TIA-222-G and Customer provided specifications. Any information not provided by ANSI/TIA-222-G or the Customer has not been considered.

Foundation and anchor designs are based strictly on ANSI/TIA-222-G. Any additional requirements may result in increased foundation size and price.

Dimensional information is preliminary only; it may change based on final engineering.

All Sabre mounts are quoted with support pipes of appropriate length for most applications if not otherwise specified. If different support pipe lengths are required at the time of the order, additional costs may be incurred.

All T-Boom sector mounts are quoted at default azimuths of 120° apart if not otherwise specified. Any changes in the sector azimuths may result in additional charges and/or an increase in delivery lead times. If anchors other than our standard deadman anchor arms are required, additional charges will be incurred. Freight charges quoted are for provided materials only. Additional freight charges may be incurred with the order of additional items.

All antennas, transmission lines, jumpers, ground kits, hangers, and hardware are to be provided and installed by others.



All tower materials will be hot dip galvanized as outlined in ASTM A-123.

This pricing does not include any sales, use, excise, contractors or any other taxes not specifically detailed in this documentation.

If a Customer requests to pick up a tower, a per truck charge may apply for dunage and loading. Storage charges may apply starting sixty (60) days after original scheduled ship date.

Due to material price fluctuations, Sabre reserves the right to review all material pricing prior to accepting any order. Any structure order placed on hold is subject to a price review at the time of its release from hold status.

Due to freight price fluctuations, Sabre reserves the right to review all freight pricing prior to accepting any order.

The lighting system quoted assumes that there will be an unobstructed view of the beacons in all directions. It is the Customer's responsibility to ensure that the lighting kit quoted meets all Federal, State, and Local ordinances for tower height and lighting type.

Title, ownership, risk of loss, risk of material obsolescence and risk of material market value decline shall pass to the Customer upon invoicing or shipment to Customer, whichever occurs earlier in time.

Delivery will be approximately 4 to 6 weeks after receipt of required information and contingent upon backlog at the time of order.

Final Shipping costs will be provided upon receipt of final site destination information.



300' S3TL
300' S3TL-HD, IN
15-6503-MEG Option II

SABRE MODEL S3T-L SELF-SUPPORTING TOWER

Quantity of one (1) 300' Sabre Model S3TL self-supporting tower.

The tower will be triangular in design with a base width of 29' - 0" tapering to 5' - 0" at the top. The tower will utilize tubular steel for tower legs and angular steel for bracing.

The tower will be designed for a basic wind speed of 90 mph with 0" of radial ice, and 40 mph with 1" of radial ice, in accordance with ANSI/TIA-222-G.

Revision G Parameters:

- Structure Class III
- Exposure Category C
- Topographic Category 1

*****Refer to Notes section for definitions of Revision G parameters***

ITEM I TOWER MATERIALS\$126,243.00

Materials to be provided include:

Complete tower steel and hardware

Anchor bolts and templates

Construction step bolts (see notes)

Outside climbing ladder with required 7" standoffs

One (1) waveguide support ladder (to support ten (10) initial lines)

Three (3) 12' T-Boom ® sector mounts with 3' standoff each with two (2) 5' pipes at the 295' elevation

Three (3) 12' T-Boom ® sector mounts with 3' standoff each with two (2) 5' pipes at the 268' elevation

One (1) 4-1/2" O.D. leg dish mount at the 210' elevation

One (1) 4-1/2" O.D. leg dish mount at the 160' elevation

Two (2) 3' sidearms each with one (1) tieback kit and one (1) 5' mounting pipe at the 35' elevation

Required lighting mounts

Safety cable kit without harness (300')

Motorola R56 grounding

One (1) 8' x 3/4" lightning rod copper clad and stiffener

One (1) 2-7/8" x 15' lightning rod extension

P.E. certified tower profile and foundation drawings

Final erection drawings



ITEM II LIGHTING SYSTEM.....\$15,373.00

One (1) Flash (E1) Dual light system with white strobe, LED beacon and sidelights with strobe cable and SO cord (200' - 350') (C30045003) designed in accordance with FAA and FCC specifications.

OPTIONS: Waveguide Bridge 2-Leg 2' x 10' (15' Direct Burial) with three (3) 3 level trapeze kits (each).....\$ 779.00

Classification of Structure:

• Class Three - Structures used primarily for essential communications such as: civil or national defense, emergency, rescue or other disaster operations, military and navigation facilities.

Exposure Categories:

• Exposure C - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat, open country, grasslands and shorelines in hurricane prone regions. ***Exposure C is the standard default for exposure categories.***

Topographic Categories:

• Category 1 - No abrupt changes in general topography, e.g. flat or rolling, no wind speed-up consideration shall be required. ***Category one is the standard default for the topographic categories.***

The permit package includes a profile drawing of the structure with member sizes; anchor bolt details; descriptive notes; structural calculations; a table of supported antennas, mounts and feedlines; and a foundation sketch and calculations (if applicable).

This information is based on ANSI/TIA-222-G and Customer provided specifications. Any information not provided by ANSI/TIA-222-G or the Customer has not been considered.

Foundation and anchor bolt designs are based strictly on ANSI/TIA-222-G. Any additional requirements may result in increased foundation size and price.

Dimensional information is preliminary only; it may change based on final engineering.

All Sabre mounts are quoted with support pipes of appropriate length for most applications if not otherwise specified. If different support pipe lengths are required at the time of the order, additional costs may be incurred.

All T-Boom sector mounts are quoted at default azimuths of 120° apart if not otherwise specified. Any changes in the sector azimuths may result in additional charges and/or an increase in delivery lead times.

Cable type safety climbing device provided does not include harness.

All antennas, transmission lines, jumpers, ground kits, hangers, and hardware are to be provided and installed by others.

All tower materials will be hot dip galvanized as outlined in ASTM A-123.

Construction step bolts have been quoted to the 140' elevation on all three legs for safety and ease of construction. Step bolts should not be used for climbing without the use of a safety climbing device or fall protection equipment.



This pricing does not include any sales, use, excise, contractors or any other taxes not specifically detailed.

If a Customer requests to pick up a tower, a per truck charge may apply for dunage and loading. Storage charges may apply starting sixty (60) days after original scheduled ship date.

Due to material price fluctuations, Sabre reserves the right to review all material pricing prior to accepting any order. Any structure order placed on hold is subject to a price review at the time of its release from hold status.

Due to freight price fluctuations, Sabre reserves the right to review all freight pricing prior to accepting any order.

The lighting system quoted assumes that there will be an unobstructed view of the beacons in all directions. It is the Customer's responsibility to ensure that the lighting kit quoted meets all Federal, State, and Local ordinances for tower height and lighting type.

Title, ownership, risk of loss, risk of material obsolescence and risk of material market value decline shall pass to the Customer upon invoicing or shipment to Customer, whichever occurs earlier in time.

Delivery will be approximately 5 to 7 weeks after receipt of required information and contingent upon backlog at the time of order.

Final Shipping costs will be provided upon receipt of final site destination information.

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150' Monopole
150' Monopole, IN
15-6503-MEG Option III

SABRE MONOPOLE

Quantity of one (1) Sabre Monopole. The monopole has an overall height of 150'. The overall height of this monopole includes the foundation projection.

The monopole will be eighteen-sided and tapered in design with a top diameter of 16" and a base diameter of 40.93".

The monopole will be designed for a basic wind speed of 90 mph with 0" of radial ice, and 40 mph with 1" of radial ice, in accordance with ANSI/TIA-222-G.

Revision G Parameters:

- Structure Class III
- Exposure Category C
- Topographic Category 1

*****Refer to Notes section for definitions of Revision G parameters***

ITEM I MONOPOLE MATERIALS.....\$40,227.00

Materials to be provided include:

Complete monopole steel and hardware
Anchor bolts and templates, (8) bolts 84" long
Step Bolts
Six (6) 6" x 12" access ports with J hooks (see notes)
Two (2) 8" x 12" access ports with J hooks (see notes)
Three (3) 10.5" x 25.5" access ports (see notes)
150' Safety Climb without harness
One (1) 8' x 3/4" lightning rod copper clad and stiffener
One (1) 2-7/8" x 15' lightning rod ext.
Motorola R56 Grounding
P.E. certified profile drawings (see notes)
P.E. certified foundation design (see notes)
Final erection drawings



OPTIONS:

12' LP Platform with Handrail with Collar Mount at the 150' elevation.....	\$ 4,807.00
Two (2) Pipe Mounts (up to 6' Dish) with Collar Mount at the 146' elevation	\$ 771.00
Two (2) 3' Sidearms with Collar Mount at the 35' elevation	\$1,257.00
Waveguide Bridge 2-Leg 2' x 10' (15' Direct Burial) with Three (3) 1 Level Trapeze Kits (each).....	\$ 690.00

Classification of Structure:

- Class Three - Structures used primarily for essential communications such as: civil or national defense, emergency, rescue or other disaster operations, military and navigation facilities.

Exposure Category:

- Exposure C - Open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat, open country, grasslands and shorelines in hurricane prone regions. ***Exposure C is the standard default for exposure categories.***

Topographic Category:

- Category 1 - No abrupt changes in general topography, e.g. flat or rolling, no wind speed-up consideration shall be required. ***Category one is the standard default for the topographic categories.***

This information is based on ANSI/TIA-222-G and Customer provided specifications. Any information not provided by ANSI/TIA-222-G or the Customer has not been considered.

Foundation and anchor bolt designs are based strictly on ANSI/TIA-222-G. Any additional requirements may result in increased foundation size and price increases.

Dimensional information is preliminary only; it may change based on final engineering.

All Sabre mounts are designed in accordance with antenna specifications. If different pipe size is required at time of order, additional costs may be incurred.

Cable type safety climbing device provided does not include harness.

Sabre's standard access port size is 6" x 12". If access ports other than as specified in this proposal are required, additional costs may be incurred.

Two (2) access ports will be located at the 3' elevation with azimuths of 0 degrees and 180 degrees. An additional access port will be located at the 7' elevation with an azimuth of 270 degrees. If orientation of access ports is different than as stated in this proposal, additional costs may be incurred.

Freight charges quoted are for provided materials only. Additional freight charges may be incurred with the order of additional items.

All antennas, transmission lines, jumpers, ground kits, hangers, and hardware are to be provided and installed by others.

All monopole materials will be hot dip galvanized as outlined in ASTM A-123.

This pricing does not include any sales, use, excise, contractors or any other taxes not specifically detailed



Optional items do not include installation prices.

The permit package includes a profile drawing of the structure with member sizes; descriptive notes; structural calculations; a table of supported antennas, mounts and feedlines; and a foundation sketch and calculations (if applicable).

Storage charges per month may apply starting sixty (60) days after original scheduled ship date.

Due to material price fluctuations, Sabre reserves the right to review all material pricing prior to accepting any order. Any structure order placed on hold is subject to a price review at the time of its release from hold status.

Due to freight price fluctuations, Sabre reserves the right to review all freight pricing prior to accepting any order.

Pricing is subject to review at the time of order. Additional costs may be applied at that time.

Title, ownership, risk of loss, risk of material obsolescence and risk of material market value decline shall pass to the Customer upon invoicing or shipment to Customer, whichever occurs earlier in time.

Delivery will be approximately 6 to 8 weeks after receipt of required information and contingent upon backlog at the time of order.

Final Shipping costs will be provided upon receipt of final site destination information.



Shelter Information:

Shelter	Weight (LBS)	Floor Load	Roof Load	Wall Rating	Seismic Rating
8'x10'	25,400	346psf	251psf	150mph	Zone 4
10'x12'	30,000	251psf	156psf	150mph	Zone 4
10'x20'	46,000	250psf	156psf	150mph	Zone 4
11'6"x24'	54,000	207psf	107psf	150mph	Zone 4

Shelter	Exterior Dims	Interior Dims	Roof Overhang
8'x10'	8'-0" x 10'-0" x 10'-2"	6'-11" x 8'-11" x 9'-0"	3"
10'x12'	10'-0" x 12'-0" x 10'-2"	8'-11" x 10'-11" x 9'-0"	3"
10'x20'	10'-0" x 20'-0" x 10'-2"	8'-11" x 18'-11" x 9'-0"	2"
11'6"x24'	11'-6" x 24'-0" x 10'-2"	10'-5" x 22'-11" x 9'-0"	2"

Construction Type:

- ◆ Floor: 5 ¾" lightweight concrete, waffle-type construction
- ◆ Walls: 4" solid lightweight concrete; 2 – Hour Fire-rated Construction per UBC
- ◆ Roof: solid lightweight concrete, 4" at eaves and 5" at ridge, gable design
- ◆ Step-joint floor perimeter design
- ◆ 5000 psi lightweight concrete
- ◆ Reinforcing steel #4 & #6 bars; 60,000 psi (Grade 60 ASTM-615)
- ◆ Ballistics tested for U.L.752 Level IV (HPR - 30.06 – Point Blank Range)
- ◆ Walls: washed exposed aggregate and sealed exterior finish
- ◆ Roof: troweled surface, sealed and liquid applied roofing membrane
- ◆ Walls: R-11
- ◆ Ceiling: R-19

Interior Finish:

- ◆ Walls: white high density polyethylene (NRP) over ¾" OSB
- ◆ Floor: smooth concrete painted non-skid gray
- ◆ Ceiling: white high density polyethylene (NRP) over ¾" OSB

Entry:

- ◆ One (1) 3070, galvanized, insulated, primed & painted, 16GA steel door, with cylinder prep or equivalent
- ◆ One (1) 3070, 16GA steel door frame, cylinder prep, or equivalent (CX p/n 501003 or 501004)
- ◆ One (1) lockset, passage, cylinder, Best, 82K0N4CSTK626 or equivalent (CX p/n 504505)
- ◆ One (1) lockset, deadbolt, cylinder, Hager, 3100 or equivalent (CX p/n 504503)
- ◆ One (1) lockset construction core, Best, MAG-LA or equivalent (CX p/n 504501)
- ◆ Two (2) keys, construction operation, Best, MAG-LA, or equivalent (CX p/n 504108)
- ◆ One (1) 6" lockset pick guard, Precision, 1625-6" or equivalent (CX p/n 504518)
- ◆ One (1) hydraulic door closer, Sargent, 1104 or equivalent (CX p/n 504100)
- ◆ One (1) set door weather-stripping
- ◆ One (1) set anti-friction bearing door hinges, non-removable pin
- ◆ One (1) door drip cap
- ◆ One (1) 6" door hold latch



Electrical: (assumes 120/240v, 200 amp, 60 HZ, single phase service, three wire)

- ◆ One (1) loadcenter, 40 space, 120/240v, 200amp main breaker, 1 phase, NEMA 1, Square D, QO140M200 & cover or equivalent (CX p/n 430077, 430078, 540103), breakers as required
- ◆ One (1) 2" sleeved ac power entry
- ◆ Duplex receptacles, 125v, 20 amp, NEMA 5-20R, Leviton, CR20V-BU or equivalent (CX p/n 430034) – wall mounted – Qty (2-6) depending on shelter size
- ◆ One (1) exterior GFCI receptacle, 125v, 20 amp, NEMA 5-20R, Cooper VGF20V or equivalent in weather proof box & cover (CX p/n 430033, 430030, 430384)
- ◆ Conduit, j-boxes, wire, etc as required

Lighting:

- ◆ Interior fluorescent light fixture, 32 watt, 2 bulb, 4 ft., T-8 with electronic ballast and wrap-around lens cover (CX p/n 470615, 470047 & (2) 470058) – Qty (6-12) depending on shelter size
- ◆ One (1) exterior light fixture, incandescent, 100watt, w/motion detector or equivalent (CX p/n 470011, 470012)
- ◆ One (1) interior light switch, 120v, 15 amp
- ◆ One (1) exterior light switch, 120v, 15 amp

HVAC:

- ◆ 8x10 and 10x12
One (1) wall mounted HVAC unit, 24,000 BTU, 5kw Heat Strip, 410A refrigerant, Bard, W24A2-A05XPXXXJ or equivalent (1phase) (CX p/n 520249) with (1) thermostat, digital, auto changeover, Honeywell, 6WU98 (CX p/n 460123)
- ◆ 10x20 and 11.5x24
Two (2) wall mounted HVAC unit, 36,000 BTU, 5kw Heat Strip, 410A refrigerant, Bard, W36L2-A05XPXXXJ or equivalent (1phase) (CX p/n 520263) with (1) lead lag controller, Bard #MC4000 (CX p/n 460004)
- ◆ HVAC supply and return grilles

Grounding:

- ◆ One (1) ¼" x 4" x 12" copper ground bar (MGB), mounted on insulators/standoff -interior
- ◆ Two (2) 1" diameter PVC penetrations through wall for ground exit

Cable Entry & Cable Ladder:

- ◆ One (1) 6-hole 4" diameter Waveguide Entry Port – 2x3configuration – with caps. Waveguide boots by others. (CX p/n 530047)
- ◆ One (1) run of 12" wide tubular cable ladder, gold chromate with appropriate hangers and mounting hardware (CX p/n 510000)

Miscellaneous:

- ◆ Three (3) set of PE sealed drawings
- ◆ One (1) wall pocket tray for files (CX p/n 480000)
- ◆ Furnish all anchorage connection brackets and lifting lugs as required to offload and secure shelter to customer supplied foundation
- ◆ Shelter operations and maintenance manual
- ◆ Building will meet all Federal, State and Local Codes



Pricing Matrix:

Site Name	Shelter
8'x10' Shelter	\$39,743.00
10'x12' Shelter	\$41,977.00
10'x20' Shelter	\$51,424.00
11'6"x24' Shelter	\$57,423.00

Price is F.O.B. Bossier City, LA. Transportation cost will be provided once final shipping point has been determined.

Bid Notes:

- 1) Offload and setup are not included.
- 2) Clear access must be provided for safe and adequate operation, free from all obstruction for transport and site installation. Installation charges, if required, are based on average costs and allows for a maximum 4 hour offload. Weather and site conditions may adversely affect offload time. Any additional charges incurred after 4 hours will be invoiced separately, as will locality surcharges.
- 3) Terms: Net 30 days after delivery or 30 days from building completion date, whichever is first and pending prior credit approval. Past due invoices are subject to late fees billable at a rate of 1-1/2% per month.
- 4) The prices include only the material, labor and services explicitly stated in this written proposal

Delivery:

Approval drawings to be submitted 20 days after award of contract; shelter delivery will be 6 weeks after receipt of approved drawings. Delivery schedule can be negotiated to meet customer requirements. Unless arrangements are made in advance, fabrication commences upon receipt of signed approval drawings.