

TOWERS

James Thomas Ground Supported Tower Systems are ideal for outdoor applications, as well as venues where rigging points are unusable or unavailable. Tower components are available in 12"x12", 15"x15", and 20.5"x20.5" profiles, and are capable of lifting a wide range of James Thomas truss products and roof systems.



12" TOWER SYSTEM

The 12" square ground support tower. A system manufactured with the purpose of providing a lifting medium for a variety of Thomas trusses ranging from 12" x 12" to heavy duty truss.



A tower erecting system can also be supplied with 12" tower system at extra cost.

Select the correct sleeve block for the type of truss being used

The towers will provide the necessary equipment to support a truss rig in venues where flying points are either not strong enough, or not in the right place. Each tower is capable of lifting 2 tons to a maximum height of 33 feet. The 2 tons weight must include the self weight of the truss rig and the motors. The truss rig is raised and lowered by means of electric chain hoists. The motor is rigged in the truss and works in double fall due to the chain being passed over the roller beam at the top of the tower. The motor is then connected onto the other side of the sleeve block. Below, we list a brief description of the parts which make up a 12" ground support tower.

The base of the tower has 4 screw jack assemblies with 6" diameter foot pads, which are adjustable to enable leveling of the tower. The base also incorporates 4 ball casters which allows the whole rig to be accurately positioned before the tower is raised. Once the tower system is ready to be raised, all the screw jacks must be adjusted evenly and must take the load off the ball casters.

The hinge section is designed to allow the towers to be assembled horizontally at truss top level before being swung and locked in the vertical operating position.

The tower sections are manufactured from aluminum 6082T6 2" x .157" thick wall tube with 1" x .125" wall diagonals. The tower sections are connected together by Camloc quick release bolts. Once the tower height has been determined, the roller beam is then fitted at the top of the tower.

The roller beam accepts the chain from the chain hoist, which is run over the top of the roller beam and back down to the other side of the sleeve block.

The sleeve block is the interface between the truss rig and the towers. It is designed to create a semi-rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower.

The standard 12" tower kit is made up of the following truss elements:

12" Tower

PRODUCT CODE	DESCRIPTION	WT lbs
B4100	Base	52.5
B4101	37.5" Hinge section	46
B3501	78.7" Hinge section	67
B0104	2'6" section	24
B0103	5' section	39.5
B0100	10' section	72.5
B4102	Roller beam	39.5
#	Sleeve block	-

Failure to comply with any load tables, equipment labels, engineering reports; or any warnings, written verbal, or implied, could result in serious injury or death.

In addition to the standard truss elements, a sleeve block is supplied, based on the type of truss being used. The following are available:

PRODUCT CODE	DESCRIPTION	WT lbs
B4108	Heavy duty sleeve block	79
B4104	GP 20.5 x 20.5 sleeve block	75
B4105	GP triangular sleeve block	72.5
B4106	GP 12 x 12 & 18 x 12 sleeve block	70.5
B4103	Pre-rig truss sleeve block	97

Other sizes of tower truss are available should they be required.

PRODUCT CODE	DESCRIPTION	WT lbs
B0101	8' tower section	59.5
B0102	6' tower section	46
B0105	1' 3" tower section	15

Outrigger and Stabilizer sets are required when using less than 3 towers. These are designed to provide stability and rigidity to single or two tower systems.

PRODUCT CODE	DESCRIPTION	WT lbs
B4003	Outrigger arm	19.5



The ground support tower system can be used outside but must be suitably anchored from the top of each tower sleeve block to the ground via a guy wire to a suitable ground anchor. We recommend that the bases are sat on top of a 3' square piece of 3/4" plywood. Should a cover be required then please refer to James Thomas Engineering approved design to suit your requirements.

The ground support tower system can also be specified with lock offs, which provide safety against chain failure. We offer 2 types of lock offs. The first type of lock off is for truss systems that will always be rigged at the top of the towers. The second type is designed to fit in the tower at the desired height, whether the truss is at the top of the tower or not.

PRODUCT CODE	DESCRIPTION	WT lbs
B4110	Tower top truss lock	-
B4120	Adjustable lock off system	-

15" TOWER SYSTEM

The 15" square ground support tower is a system manufactured for the purpose of providing a lifting medium for a variety of Thomas trusses from 20.5" x 20.5", Heavy duty, Supertruss, and Pre-rig truss to Roof systems.



The towers will provide the necessary equipment to support a truss rig in venues where the flying points are either not strong enough, or not in the right place. Each tower is capable of lifting 4 tons to a maximum height of 40 feet. However, if you use a CM 1 ton hoist, you will only be able to lift 2 tons (ie. block and fall). The 4 ton weight must include the self weight of the truss rig and the motors. The truss rig is raised and lowered by means of electric chain hoists. The motor is rigged in the truss and works in double fall due to the chain being passed over the roller beam at the top of the tower. The motor is then connected onto the other side of the sleeve block. Below, we list a brief description of the parts that make up a 15" ground support tower.

The **base** of the tower has 4 screw jack assemblies with 6" diameter foot pads, which are adjustable to enable levelling of the tower. The base also incorporates 4 ball casters, which allow the whole rig to be accurately positioned before the tower is raised. Once the tower system is ready to

be raised, all screw jacks must be adjusted evenly and must take the load off the ball casters.

The **hinge section** is designed to allow the towers to be assembled horizontally at truss top level before being swung and locked in the vertical operating position. The **tower sections** are manufactured from 6061T6 aluminum 2" x .157" thick wall tube with 1" x .125" wall diagonals. The tower sections are bolted together to allow 30" adjustments in height up to a maximum of 40 feet. Once the tower height has been determined, then the roller beam is fitted at the top of the tower. The **roller beam** accepts the chain from the chain hoist, which is run over the top of the roller beam and back down to the other side of the sleeve block.

The **sleeve block** is the interface between the truss rig and the towers. It is designed to create a semi rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower.

Outriggers needed if used in single or double tower configuration.

PRODUCT CODE	DESCRIPTION	WT lbs
B4205	Pre-rig truss sleeve block	97
B4206	Heavy duty sleeve block	79
B4207	20.5" x 20.5" Sleeve Block	75
For SuperTruss refer to each trusses specification sheet		

Standard 15" Tower Parts are:

PRODUCT CODE	DESCRIPTION	WT lbs
B4200	Base	53
B4201	37.5" Hinge section	50
B3801	78.7" Hinge section w/ forks	70.5
B4202	Roller Beam	50
B4203	Rocker Beam	49
B0200	10' section	97
B0201	8' section	90
B0202	5' section	49
B0203	2'6" section	32
#	Sleeve block	-

Failure to comply with any load tables, equipment labels, engineering reports, or any written, verbal, or implied warnings, could result in serious injury or death.

12" SUPERTOWER SYSTEM

The 12" Supertower square ground support is a system manufactured for the purpose of providing a lifting medium for a variety of Thomas trusses from 20.5" x 20.5", Heavy duty, Supertruss, and Pre-rig truss to Roof systems. With forked connections, the Supertower is faster to put together and has a higher load rating than a bolted tower.



The towers will provide the necessary equipment to support a truss rig in venues where the flying points are either not strong enough, or not in the right place. Each tower is capable of lifting 4 tons to a maximum height of 40 feet. However, if you use a CM 1 ton hoist, you will only be able to lift 2 tons (ie. block and fall). The 4 ton weight must include the self weight of the truss rig and the motors. The truss rig is raised and lowered by means of electric chain hoists. The motor is rigged in the truss and works in double fall due to the chain being passed over the roller beam at the top of the tower. The motor is then connected onto the other side of the sleeve block. Below, we list a brief description of the parts that make up a 15" ground support tower.

The base of the tower has 4 screw jack assemblies with 6" diameter foot pads, which are adjustable to enable levelling of the tower. The base also incorporates 4 ball castors, which allow the whole rig to be accurately positioned before the

tower is raised. Once the tower system is ready to be raised, all screw jacks must be adjusted evenly and must take the load off the ball castors.

The hinge section is designed to allow the towers to be assembled horizontally at truss top level before being swung and locked in the vertical operating position. The tower sections are manufactured from 6061T6 aluminum 2" x .157" thick wall tube with 1" x .125" wall diagonals. The tower sections are pinned together to allow 30" adjustments in height up to a maximum of 40 feet. Once the tower height has been determined, then the roller beam is fitted at the top of the tower. The roller beam accepts the chain from the chain hoist, which is run over the top of the roller beam and back down to the other side of the sleeve block.

The sleeve block is the interface between the truss rig and the towers. It is designed to create a semi rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower.

12" Supertower

PRODUCT CODE	DESCRIPTION	WT lbs
B4100	BASE	52.5 lbs
B01S012H	1FT HINGE SECTION	16.09 lbs
B01S036H	3FT HINGE SECTION	29.42 lbs
B4102	Rollerbeam	39.5 lbs
B01S120	10' Section	79.97 lbs
B01S060	5' Section	45.49 lbs
B01S048	4' Section	28.95 lbs
E20-12SP	TOWER SLEEVE PLATE FOR 20.5" TRUSS	32 lbs

15" SUPERTOWER SYSTEM

The 15" Supertower square ground support is a system manufactured for the purpose of providing a lifting medium for a variety of Thomas trusses from 20.5" x 20.5", Heavy duty, Supertruss, and Pre-rig truss to Roof systems.



With forked connections, the Supertower is faster to put together and has a higher load rating than bolted tower.

The towers will provide the necessary equipment to support a truss rig in venues where the flying points are either not strong enough, or not in the right place. Each tower is capable of lifting 4 tons to a maximum height of 40 feet. However, if you use a CM 1 ton hoist, you will only be able to lift 2 tons (ie. block and fall). The 4 ton weight must include the self weight of the truss rig and the motors. The truss rig is raised and lowered by means of electric chain hoists. The motor is rigged in the truss and works in double fall due to the chain being passed over the roller beam at the top of the tower. The motor is then connected onto the other side of the sleeve block. Below, we list a brief description of the parts which make up a 15" ground support tower.

The base of the tower has 4 screw jack assemblies with 6" diameter foot pads, which are adjustable to enable levelling of the tower. The base also incorporates 4 ball castors, which allow the whole rig

to be accurately positioned before the tower is raised. Once the tower system is ready to be raised, all screw jacks must be adjusted evenly and must take the load off the ball castors.

The hinge section is designed to allow the towers to be assembled horizontally at truss top level before being swung and locked in the vertical operating position. The tower sections are manufactured from 6061T6 aluminum 2" x .157" thick wall tube with 1" x .125" wall diagonals. The tower sections are pinned together to allow 30" adjustments in height up to a maximum of 40 feet.

Once the tower height has been determined, then the roller beam is fitted at the top of the tower.

The roller beam accepts the chain from the chain hoist, which is run over the top of the roller beam and back down to the other side of the sleeve block. The sleeve block is the interface between the truss rig and the towers. It is designed to create a semi rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower.

15" Supertower

PRODUCT CODE	DESCRIPTION	WT lbs
B4200	BASE	52.5
B02S66H	66" hinge section - 2 pieces	B01S012H
B01S036H	3' hinge section	B01S036H
B02SRB1	Rollerbeam extended	B4102
B02S120	10' Section	B01S120
B02S084	7' Section	47.23 lbs
B02S060	5' Section	B01S048
B02S048	4' Section	
B02S036	3' Section	
B20-15SP	Tower sleeve plate for 20.5" truss	
B1409B	Tower sleeve plate for pre-rigged SuperTruss	

20.5" SUPERTOWER SYSTEM

The 20.5" Supertower is a system manufactured with the purpose of providing a lifting medium for a variety of Thomas trusses ranging from 12" x 12" to 30" x 30" Super-Mega.



The towers will provide the necessary equipment to support a truss rig in venues where the flying points are either not strong enough, or not in the right place. Each tower is capable of lifting over 6 tons to a maximum height of 65 feet. The 6 ton weight must include the self weight of the truss rig and the motors. The truss rig is raised and lowered by means of electric chain hoists. The motor is rigged in the truss and works in double fall due to the chain being passed over the roller beam at the top of the tower. The motor is then connected onto the other side of the sleeve block. Below, we list a brief description of the parts which make up a ST20.5" ground support tower. The base of the tower has 4 screw jack assemblies with 6" diameter foot pads, which are adjustable to enable leveling of the tower. The base also incorporates 4 ball castors, which allow the whole rig to be accurately positioned before the tower is raised. Once the tower system is ready to be raised, all screw jacks must be adjusted evenly and must take the load off the ball castors. The hinge section is designed to allow

the towers to be assembled horizontally at truss top level before being swung and locked in the vertical operating position. The tower sections are manufactured from 6061T6 aluminum 2" x .157" thick wall tube with 1" x .125" wall diagonals. The tower sections are connected together by double ended spigoted connectors. The modular tower sections allow 30" adjustments in height. Once the tower height has been determined, then the roller beam is fitted at the top of the tower. The roller beam accepts the chain from the chain hoist, which is run over the top of the roller beam and back down to the other side of the sleeve block. The sleeve block is the interface between the truss rig and the towers. It is designed to create a semi-rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower. Outrigger arms are required when not used in a 4-post grid configuration designed to create a semi rigid joint between the truss grid and the towers by using 16 heavy duty 4" wheels to guide the rig up each tower.

20.5" Supertower

PRODUCT CODE	DESCRIPTION	WT lbs
B5200-STEEL	Base	159.1
B20T036H	3.67' Hinge section	29.3
E20T060	5' section	30.9
B20T096	8' section	49.4
E20T060	5' section	39.5
B0T120	10' section	72.5
E20T-RB	Roller beam	39.5
#	Sleeve block	-

A tower erecting system can also be supplied with the 20.5" tower system at extra cost.

Ballast Base B4209 can be attached directly to the tower to provide ballast weight.

Select the correct sleeve block for the type of truss being used

SUPERMEGA TOWER 30 x 30

In line with our other SuperMega products, James Thomas Engineering has produced a 30" x 30" tower. This diverse product can be used either as a tower or as truss. It is built for applications requiring heavy loading and/or height capabilities. Made from 6061T6 alloy, the truss has 3" OD x 1/4" main chords and 2" x 0.157" diagonal tubes.



Tower: When the desired working load is 13,000 pounds, this single tower can be a maximum height of 56' with the appropriate anchorage base plate. As a goal post, the maximum height will be 73' and when used as a corner in a 4 post grid 110' (both with the appropriate anchorage base plate). When the desired

working load is 26,000 pounds, this single tower can be a maximum of 40' with the appropriate anchorage base plate. As a goal post, 54' will be the maximum height and when used as a corner in a 4 post grid 81' (both with the appropriate anchorage base plate).

SUPERMEGA TOWER 30x30

PRODUCT CODE	DESCRIPTION	WT lbs
B31240	20' Section	378
B31144	12' Section	227
B31120	10' Section	189
B31096	8' Section	162
B31060	5' Section	126
B3100	60° corner gate	-
B3101	90° corner gate	-
B3102	120° corner gate	-
B3103	135° corner gate	-
B3104	3 way gate	31
B3105	3 way gate with lifting point	-
B3106	Sleeve Block (30" tower)	341

Loading chart

Allowable Load Data Span feet	Maximum Allowable Uniform Loads		Maximum Allowable Center Point Loads	
	Loads pounds	Maximum deflection inches	Loads pounds	Maximum deflection inches
10	10,670	0.433	10,670	0.670
20	10,670	0.433	10,670	0.670
30	10,670	1.77	10,670	1.77
40	10,670	3.0	10,670	3.0
50	10,317	3.7	7,460	3.7
60	10,317	4.4	7,460	4.4
70	9,442	5.2	4,712	5.2
80	9,442	5.9	4,712	5.9

LOADING FIGURES show maximum loads between supports in addition to self weight of truss. * Denotes load limited to suit maximum shear capacity. All loads include 20% overload factor for dynamic effects.

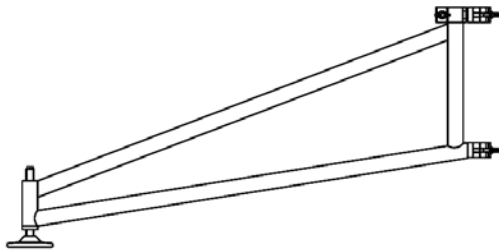
TOWER ACCESSORIES

Outriggers are designed to provide stability and rigidity to any James Thomas Engineering Tower system. Outriggers are required when using less than three towers in a temporary system. Please rely on your engineering documents to determine when and where to safely use outriggers.

Small Outrigger arm suitable for all tower systems P/N B4003 19.5 lbs.

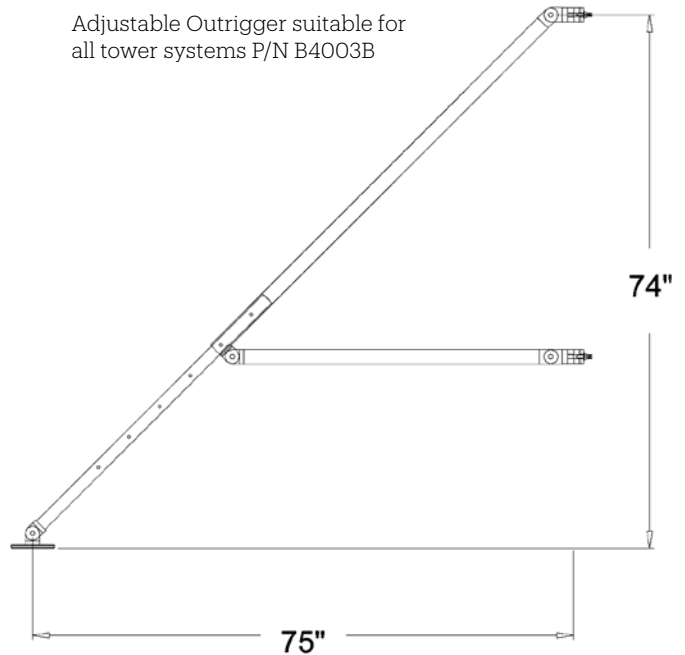


Small Outrigger arm suitable for all tower systems P/N B4003 19.5 lbs.

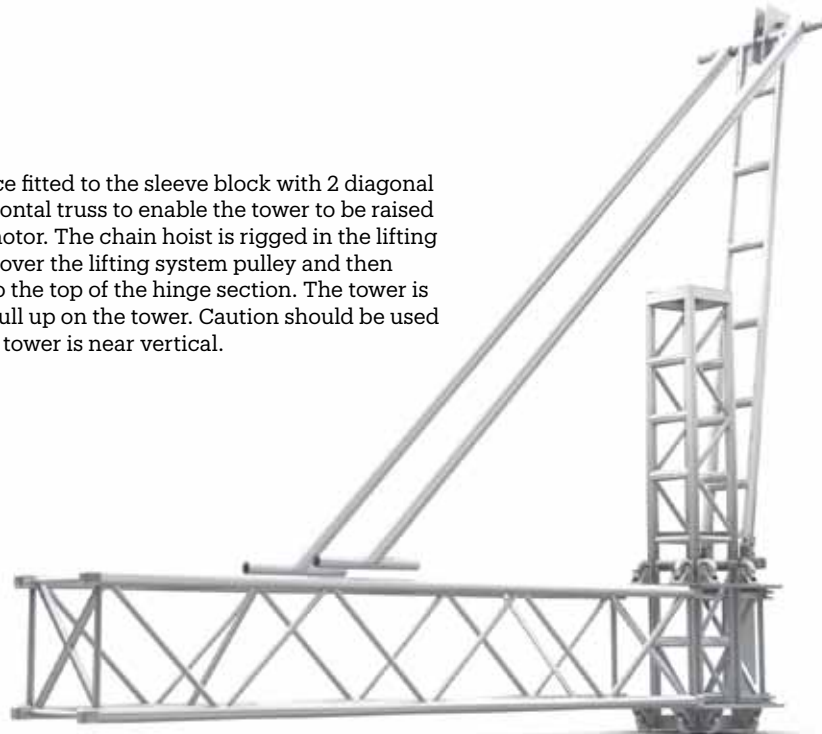


Outrigger arms are required when using less than 3 towers. These are designed to provide stability and rigidity to single or 2 tower systems.

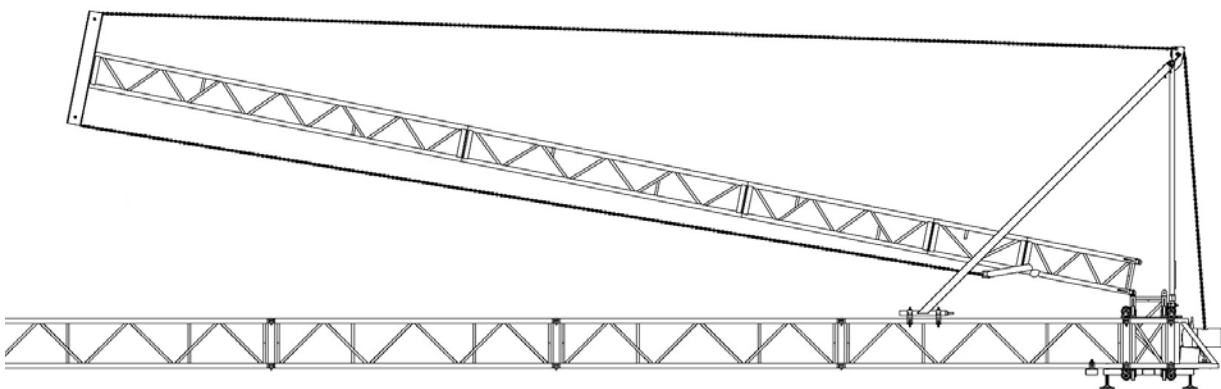
Adjustable Outrigger suitable for all tower systems P/N B4003B



The Tower Lifting System is a device fitted to the sleeve block with 2 diagonal braces which clamp on to the horizontal truss to enable the tower to be raised or lowered safely using the chain motor. The chain hoist is rigged in the lifting point and the hoist chain is passed over the lifting system pulley and then around the Roller Beam and fixed to the top of the hinge section. The tower is raised by using the chain hoist to pull up on the tower. Caution should be used to not pull the tower over when the tower is near vertical.



PRODUCT CODE	DESCRIPTION	WT lbs
B4250	Tower Lifting System	38
B4003	Small Outrigger arm	19.5
B4003B	Large Outrigger	-

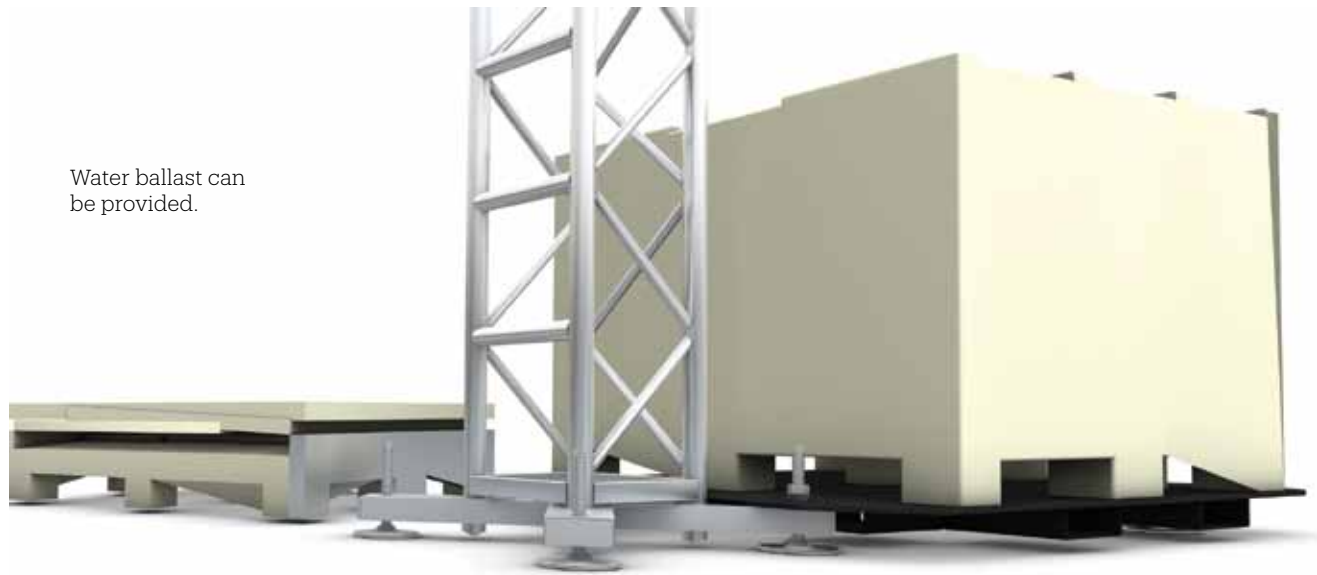


The ground support tower system can be used outside but must be suitably anchored from the top of each tower sleeve block to the ground via a guy wire to a suitable ground anchor. We recommend that the bases are placed on top of a 3' square piece of 3/4" plywood. Should a cover be required, please refer to James Thomas Engineering for an approved design to suit your requirements.

The ground support tower system can also be specified with lock offs, which provide safety against chain failure. We offer 2 types of lock offs. The first lock off is for truss systems that will always be rigged at the top of the towers. The second type of lock off is designed to fit in the tower at the desired height, whether the truss is at the top of the tower or not.

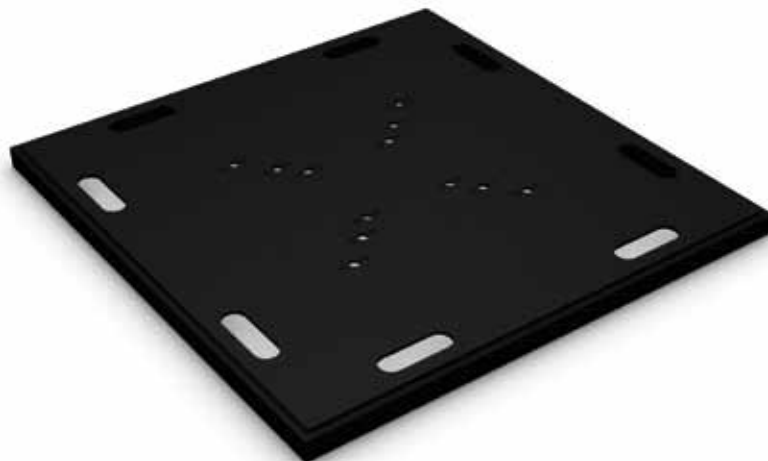
BASE PLATES

The James Thomas Engineering B4209 Ballast Base attaches to our standard 12x12, 12x18, and 15x158 b4200 tower bases, as well as to our bigger 20.5x20.5 B5200 series tower bases. The B4209 is made of steel, can be hand lifted at the corners, fork entries are also built into all four sides for quicker transport. This base attachment features the same adjustable feet as the tower base to ensure the pad is level. It can be ground stacked while mounted on the base or used on its own as a ballast weight. Our Ballast Base container holds up to 3,000 lbs of water weight in a steel reinforced, UV stabilized polymer enclosure protected by a double-layer liner, lockable lid and can be stacked 3 high for a total filled weight of 9,000 lbs.



Water ballast can be provided.

PRODUCT CODE	DESCRIPTION	WT lbs
B4209	Ballast Base Assembly	525
B4209-CONT	Ballast Weight Container	225
B4209-BRIDGE	Container Fill Bridge	6
B4209-LIN	Double Layer Liner	4.5
B4209-CAP	Tamper Evident Drain Cover	0.2
FA1HN	Hex Nut (Base Attachment)	-
FA1FN	Washer (Base Attachment)	-
P6578 R2	Screw Jack Top Hat	-
GO150-Z	9" Threaded Screw Jack	-
GO151-Z	Base Pad	-
GO152	Base Pad Bolt Set	-
GO153B	Base Hat Bolt Set	-



James Thomas Engineering 18645-01 36" x 36" steel floor base is standard for indoor use. This powder-coated base fits truss sizes 12x12, 12x18, 15x15, and 20.5x20.5 towers. Nut-plates allow users to easily attach the truss without flipping the plate. Hand cut outs allow for easier mobility.

Weight **115 lb**



James Thomas Engineering B4620 24" x 24" steel floor base is standard for indoor use. This powder-coated base fits truss sizes 12x12, 12x18, 15x15, and 20.5x20.5 towers. Nut-plates allow users to easily attach the truss without flipping the plate.

Weight **59 lb**