



## **Heavy-Duty Scaffolding Assembly, Use, & Safety Manual**

Additional manuals are available free of charge from:

**Non-Stop Scaffolding, Inc.**

**1314 Hoadley Street**

**Shreveport, LA 71104**

**1-800-845-0845**

**318-222-0702**

-or-

download them from

[nonstopscaffolding.com](http://nonstopscaffolding.com)

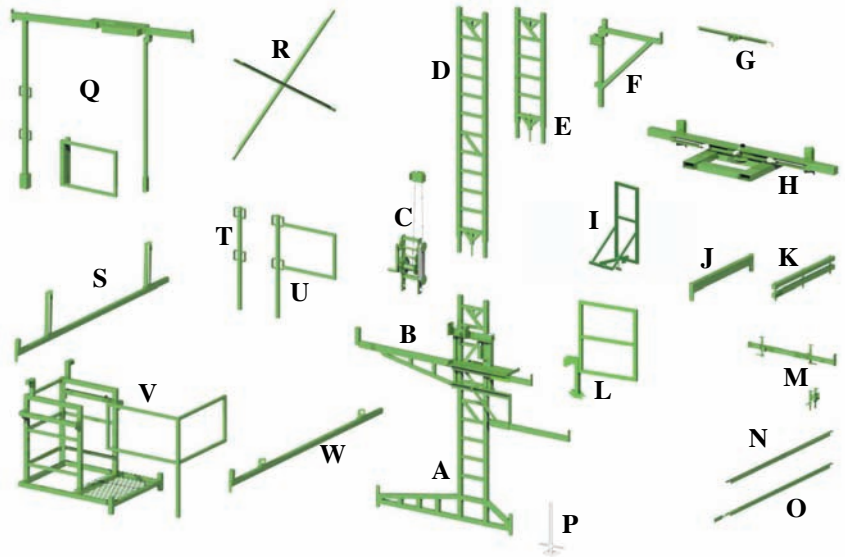
**See page 3 for instructions for using  
this manual in a comprehensive safety  
training program with documentation.**



**WARNING:** This booklet contains important safety information which must be read, understood, and followed by ALL workers on the scaffold. Failure to do so could cause serious injury or death.

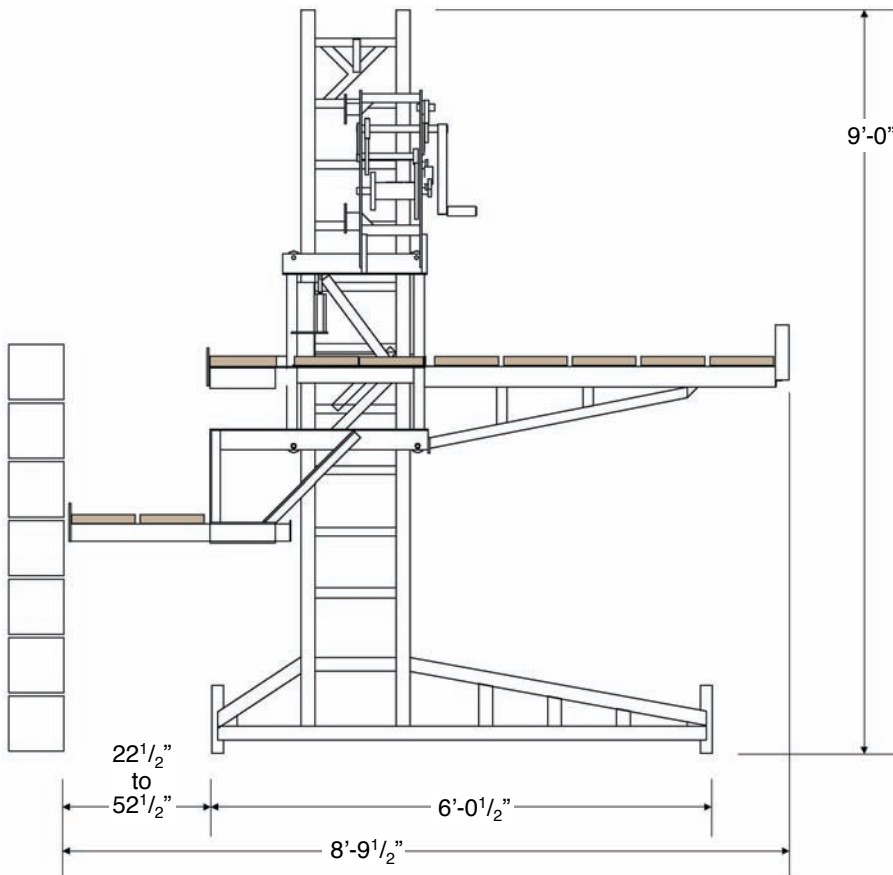
## Non-Stop Heavy-Duty Component Parts

A. 9' Base Tower.....	91 lbs.
B. Elevating Carriage.....	127 lbs.
C. Winch and Pulley Assembly .....	74 lbs.
D. 9' Tower Extension .....	70 lbs.
E. 4'-6" Tower Extension.....	31 lbs.
F. Carpenters' Bracket.....	28 lbs.
G. Wall Tie-In Bracket.....	10 lbs.
H. Swivel Forklift Bar.....	225 lbs.
I. Barricade Guardrail.....	31 lbs.
J. Rack Leveler.....	16 lbs.
K. Rack Brackets (two pieces).....	52 lbs.
L. Masons' End Guardrail Panel.....	22 lbs.
M. Pilaster Plank Arm and Clamp .....	23 lbs.
N. Straight Brace.....	13 lbs.
O. Adjustable Straight Brace .....	13 lbs.
P. Leveling Jack.....	13 lbs.
Q. Overhead Protection .....	98 lbs.
R. X-Brace.....	17 lbs.
S. Inside Corner Return.....	46 lbs.



T. Guardrail Post.....	7 lbs.
U. Laborers' End Guardrail Panel.....	17 lbs.
V. Access Landing and Guardrail.....	171 lbs.
W. Inside Corner Bracket.....	40 lbs.

## Specifications



Maximum Weight Capacity per Tower.....	4000 lbs.
Maximum Working Height.....	552 feet
Laborers' Platform.....	5 bds.
Masons' Workbench.....	3 to 5 bds.
Masons' Platform.....	0 to 3 bds. std. (5 max.)
Face of Wall to Back of Scaffold.....	9'-0"
Tower Width .....	16"
Cut Board Length.....	80.5"
Spacing Between Tower Legs.....	7'-0"
Masons' platform is 5'-0" below top of tower when cranked to the top of the tower.	

## How To Use This Manual

Employees who have never worked on Non-Stop must be trained in its proper erection, use, and dismantling before they are allowed to use the scaffolding. Your company instructor or a factory rep must conduct the training.

At the end of the class, participants take the test at the end of this manual. Any incorrect answers are discussed until the participant understands the concept presented in the question. The test documents are then kept in your company records for later verification.

Non-Stop will issue a card for each participant who successfully completes the training. E-mail your company mailing address and the list of participants to the email link at our website. Faxes are not accepted.

## Instructors

- Individuals who are certified as competent persons for conventional scaffolding, have been trained by Non-Stop, and have experience erecting, using, and dismantling Non-Stop scaffolding.
- Those certified by Non-Stop as instructors.

## Note to Instructors

Photo-copy pages 19 and 20 if necessary so each participant has his own test to fill out at the end of the class.

Go over any missed questions. Be sure the participant understands the correct answer and initials the answer.

Give the tests to your office personnel and email the list of students to Non-Stop.

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## General Safety Guidelines

Non-Stop Scaffolding meets or exceeds applicable OSHA and ANSI standards for the design and construction of steel scaffolding for masonry construction. The erection and use of Non-Stop scaffolding to comply with OSHA and other applicable safety codes is the responsibility of the contractor.

It is the responsibility of all users to read and comply with the following common sense guidelines which are designed to promote safety in the erecting, dismantling, and use of Non-Stop scaffolding. These guidelines do not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If these guidelines in any way conflict with any state, local, federal, or other government statute or regulation, contact Non-Stop Scaffolding for advice.

1. Survey the job site for hazards, such as untamped earth fills, ditches, debris, high voltage electrical wires, unguarded openings, and other hazardous conditions. All hazardous conditions should be corrected.

2. Inspect all equipment before use. Never use any equipment that is damaged or defective. Do not allow anyone other than Non-Stop Scaffolding to alter or repair any component.

3. Components manufactured by other companies must not be intermixed with Non-Stop scaffolding.

**4. Scaffolds must be erected and used according to assembly, use, and safety manual. Manuals must be kept on the job site.**

**5. Do not erect, use, or dismantle a scaffold unless under the supervision of a competent person authorized to halt work if a problem arises.**

6. Erected scaffolds should be continually inspected by users to be sure that they are maintained in safe condition. Use the Daily Checklist in this manual. Report any unsafe condition to your supervisor. Never take chances! If in doubt regarding the safety or the use of the scaffold, consult Non-Stop Scaffolding.

7. Do not erect or dismantle scaffolding when other crafts are working directly above or below the area where you must perform your work.

8. Never use equipment for purposes or in ways it was not intended.

9. Do not work on scaffolds if your physical condition is such that you feel dizzy or unsteady in any way.

10. When scaffolds are to be partially or fully enclosed, specific precautions must be taken to assure frequency and adequacy of ties attaching the scaffolding to the building due to increased load conditions resulting from the effects of wind and weather on enclosure materials. Contact Non-Stop Scaffolding for advice.

11. Do not overload the scaffold. Follow Non-Stop's safe working load recommendations.

12. Do not jump onto planks or platforms.

13. Do not use ladders or makeshift devices on top of working platforms to increase the height.

14. Check to be sure that the scaffolding has not been altered in any way that would make it unsafe. If so, correct the problem before dismantling. This includes all scaffold ties.

15. Inspect planks before dismantling to be sure they are safe to work on.

16. Consideration must be given as to the effect removal of a component will have on the rest of the scaffold prior to that component's removal.

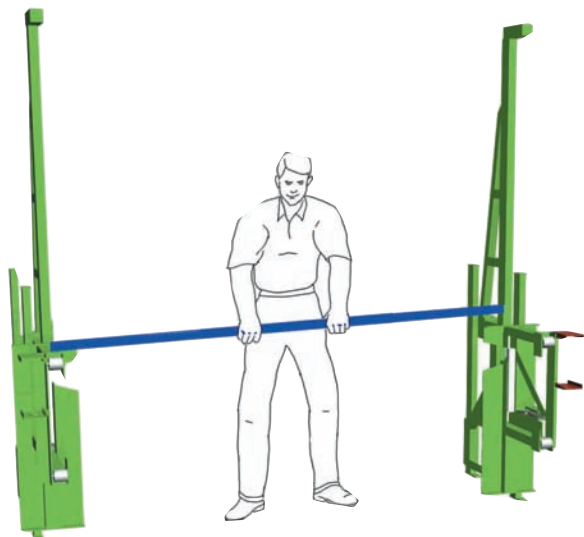
17. Do not remove ties if more than 45' of tower is in place above the work platform.

18. Do not accumulate excess scaffold components or equipment on the scaffold as it is dismantled.

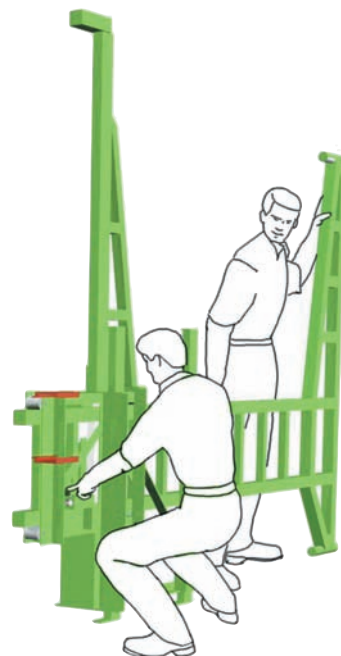
19. Lower dismantled components in an orderly manner. Do not throw off of scaffold. Do not abuse or misuse the scaffold equipment.

20. Dismantled equipment should be stockpiled in an orderly manner.

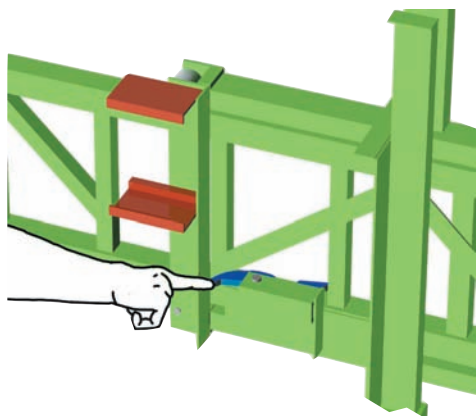
## First-Time Assembly of Heavy-Duty Scaffolding



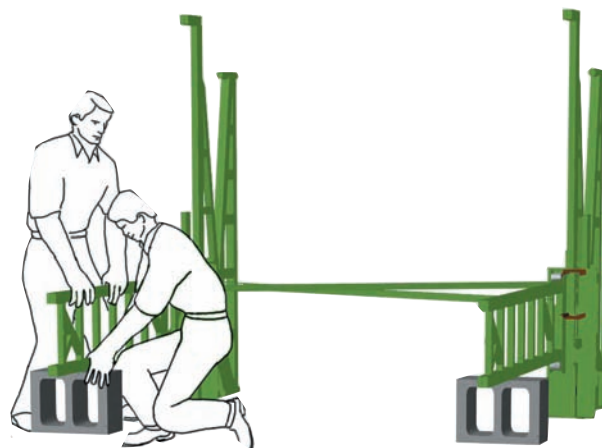
1. Stand 2 elevating brackets (one left-hand and one right-hand) up on edge about 7 feet apart (red markings indicate a left-hand elevating bracket or winch). In this picture, the left-hand bracket is on the worker's left. Be sure they are laid out correctly. Use a straight brace to gauge the 7-foot spacing. If the ground is very uneven or muddy, stand the brackets on each end of an 8 foot plank.



2. Roll a base tower into each elevating bracket.



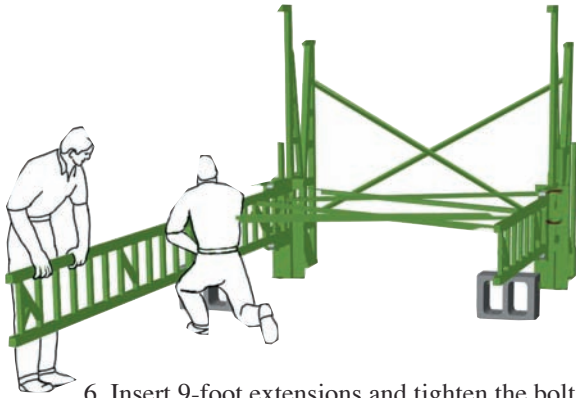
3. The safety catch must be manually pushed back to the unlocked position each time a tower rung hits it. Put one finger on the tip end of the safety catch when you do this. This will keep your fingers from being pinched when the rungs move the safety catch.



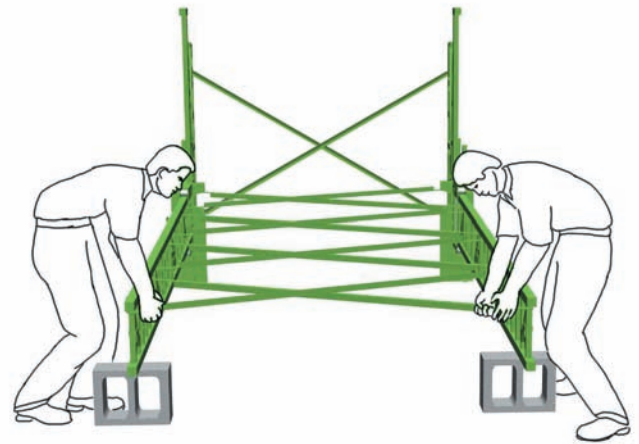
4. When the base tower is rolled into the elevating bracket as far as it will go, put a 12-inch block, or something similar, under the end of the tower to hold it up in the air. This will make it easier to add the 9-foot extensions.

At this point, review step 1 to be sure the left and right sides are oriented correctly before proceeding.

5. Install three x-braces NOW, BEFORE adding extensions. Always fasten the x-brace locks on the bottom (base tower end) first, and then the top locks. Install x-braces so the "V" of the angle iron faces downward, toward the bottom of the base tower. This will prevent mortar droppings from collecting on the brace.



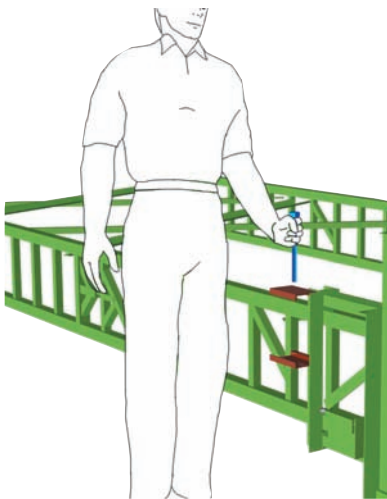
6. Insert 9-foot extensions and tighten the bolts snugly with a 1-1/8" wrench. If you happen to insert an extension upside-down, the bolt will be 1 inch off center of the hole and the x-brace locks will be on opposite sides of the tower.



7. Move the 12-inch blocks down to the end to keep the tower from see-sawing as you add more extensions. You can leave them there until you're finished. You do not have to move them again.

8. Install x-braces as you go. It's easier to install braces if you stand on the *outside* of the towers, as shown. Remember to always fasten the locks closest to the base tower first. **Leave one brace out at least halfway up** to give the forklift bar clearance. Check to be sure the tower will be bottom-heavy when the forklift raises it.

You do not have to install every x-brace. You may install every other x-brace, but you must always install the brace at the very top and the very bottom. Never skip 2 braces.



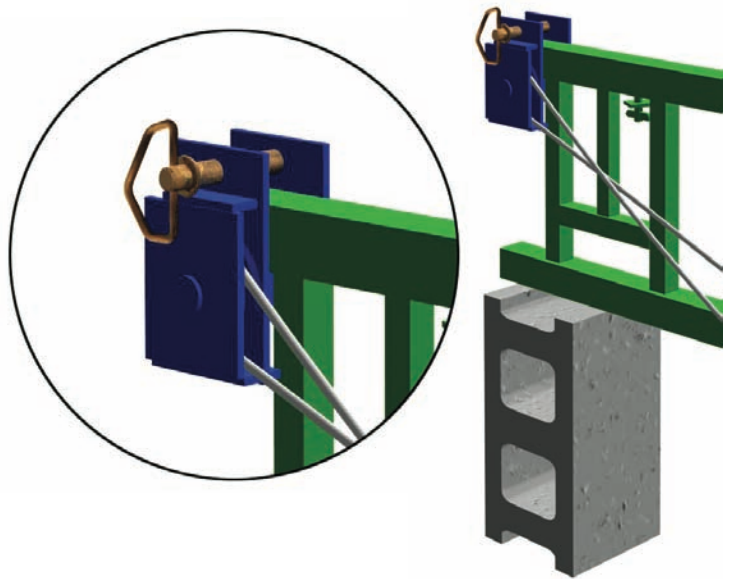
9. Remove the bolt from the winch receiver on the elevating bracket. There is a plastic cap on the threads to keep the nut from vibrating off in shipment — remove and discard the cap.

10. Unwind the cable and free the pulley from the winch. Drop the cable and pulley on the ground. (The winch-cable-pulley assembly is bound together tightly at the factory to prevent any damage or tangling in transit. If the pulley seems hard to free, unwind the cable first. That will give you plenty of slack to maneuver the pulley off the winch drum.) **DO NOT LOOSEN ANY HARDWARE** on the winch.





11. Slide the winch (handle side up) into the winch receiver and hand-tighten the bolt. Be sure to match left-hand winches to left-hand brackets and right-hand winches to right-hand brackets. Red markings indicate left-hand components. **DO NOT** crank the slack cable onto the winch now, that comes later.

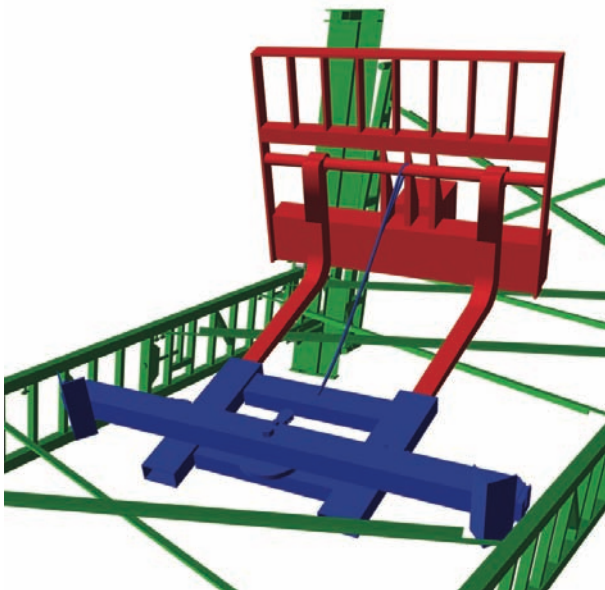


12. Mount the pulley on the tower as high as possible. Be sure the cable is not twisted at any point between the winch and the pulley. **MOUNT THE PULLEY EXACTLY AS SHOWN.**

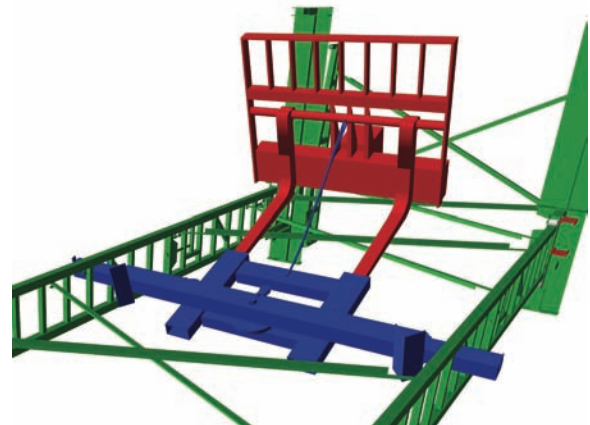
13. If the pulley does not reach the top of the tower, it can be mounted in any space that does not contain an x-brace lock.



**MOUNT THE PULLEY EXACTLY AS SHOWN.**



14. Pick up the swivel forklift bar with the forks and fasten the safety chain to the mast with a small amount of slack left in the chain. Pull the rope to retract the plungers on the swivel forklift bar. You can now position the bar between the towers. **Do Not Insert The Bar In A Space That Contains X-brace Locks!**



Releasing the rope will cause the plungers to extend under spring tension, capturing the towers on the swivel forklift bar. The towers may now be raised.

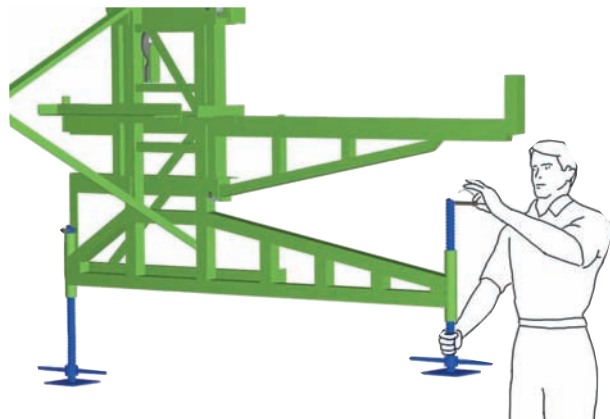
**Do Not Use a Forklift to Lift or Lower Towers That Are Over 45 Feet High. A Base Tower and 4 Extensions is 45 Feet.**

**WATCH OUT FOR OVERHEAD POWER LINES!**





The tower can be swiveled 60° in either direction in order to land it parallel to the wall. This allows you to drive up to the wall from just about any angle, such as when turning corners, insets, inside corner returns, and other difficult job layouts.

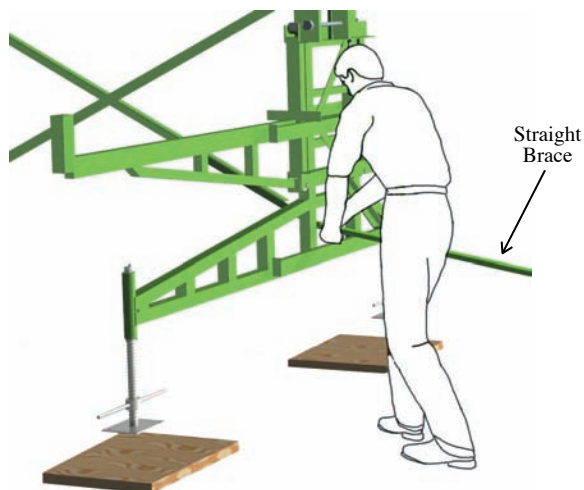


15. With the tower in the air, install the leveling jacks and fasten them in place with the provided snap pins.

16. Lay out mud sills or pads as you normally would for any other kind of scaffolding. The scaffold base must be set on an adequate sill or pad to prevent slipping or sinking and fixed thereto where required.

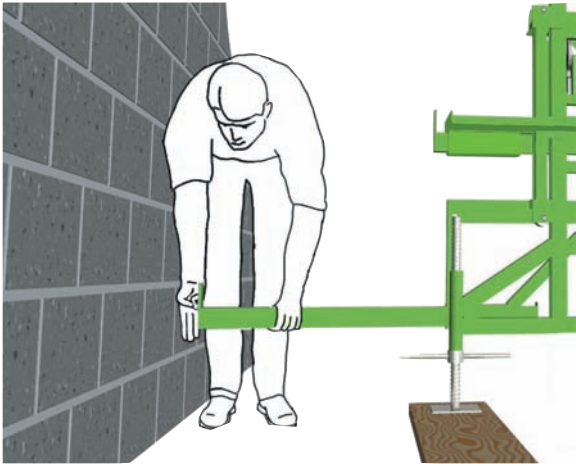


Inspect the scaffold foundation continuously, especially after a rain or other change in the weather that could affect ground conditions. Failure to provide a sound foundation may cause the scaffold to become unstable or collapse.



17. Before landing the tower at the wall, attach it to the tower beside it with a straight brace (this will set your 7 foot spacing automatically). As you lower the tower, one leveling jack will make complete, weight-bearing contact with the ground before the other three. When it does, stop lowering and tighten the other three jacks. The tower will be almost plumb.

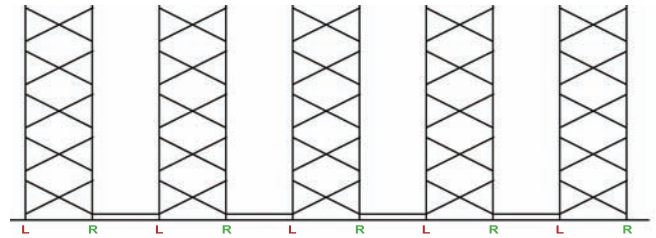
*Pairs of towers CAN be spaced closer together than the standard 7 feet. However, they should be at least 20" apart. You can lock in the new spacing by drilling a 9/16" hole in the straight brace and cutting shorter material boards.*



18. Space the towers about three fingers (2 inches) away from the footing when the masons' walkboard support (known as a "pullout") is extended. The individual legs can be easily pushed or pulled into position.

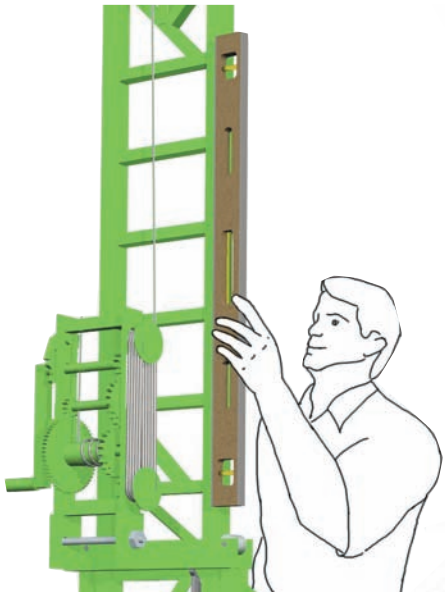


**The masons' walkboards must be no farther than 14 inches from the face of the wall.**



You now have a completely assembled tower. The towers will be placed at 7-foot intervals along the wall as shown above. The pairs will be connected together at the very bottom with a straight brace. This arrangement will give you a braced bay, then an open bay, a braced bay, then an open bay, etc., down the length of the wall. There will not be any braces in the open bay except for the straight brace at the bottom and adjustable straight braces every 27 feet of height.

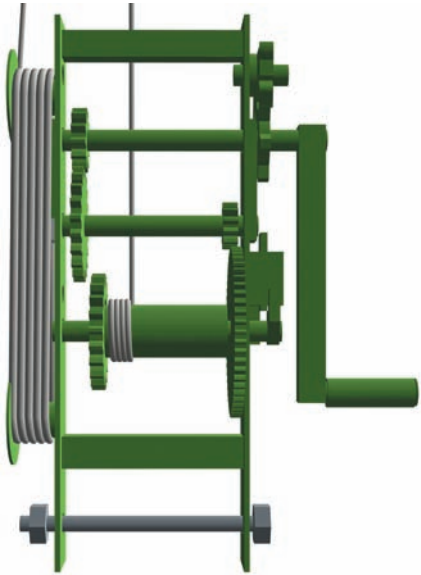
**Adjustable straight braces are installed as the work platform passes 27-foot vertical increments. They may be installed ahead of time, but it is not required.**



19. Plumb the tower. First plumb each individual leg, then raise the low leg of the pair by turning both leveling jacks an equal number of turns. Place your level on the tower itself to get true readings; never place it on the elevating bracket.







A flat spot will not reduce the load-carrying ability of the cable. In this application, a flat spot is only a dimensional, rather than a structural, imperfection. Replace a cable only if it is flattened to less than one-half of its original diameter, or if it contains three or more broken wires in any one strand. Use only genuine Non-Stop cables. Plain steel cable will corrode and is not OSHA-approved for this application.

20. Take up any slack in the cable. First, be sure there is no cable on the drum. Next, wrap any surplus cable around the spools on the side of the winch. This will keep the cable from cross-wrapping on the drum and being damaged. *The cable must feed back up to the pulley on the tower side of the spools.* Finally, take up any remaining slack by cranking it onto the winch drum.

**Always start out with two to four wraps of cable on the drum.**

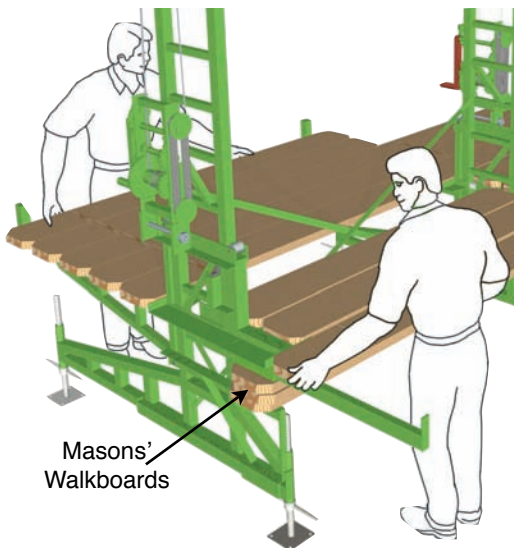


When starting out on the ground, always wrap any surplus cable around the spools on the side of the winch. **DO NOT** crank it onto the winch drum.



The cable must feed back up to the pulley on the tower side of the spools. Otherwise, the winch can possibly snag on the rungs as the scaffold goes up.

## Planking



21. Deck the scaffold and store the masons' walkboards on the shelf provided under the material boards. This will prove to be a big timesaver. The boards will be ready when needed without having to go find them and walk them all in from the end of the scaffold.

**The cut-boards between towers are 80-1/2 inches long.**



Planks must be installed according to OSHA standards for scaffolding. Planks must extend 6 to 12 inches past the center of their support. Planks must lap each other by at least 12 inches. Use only scaffold-grade planks.



Check the plank laps at the beginning of every work day. Check the laps continuously throughout the work day, especially after cranking or landing materials.



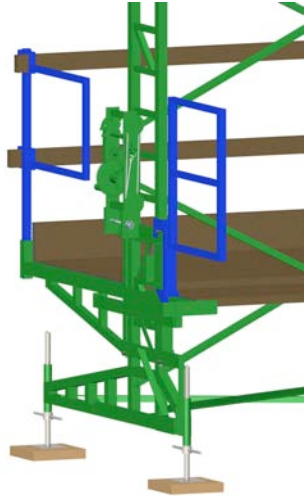
Use only scaffold grade wood planking or fabricated planking and decking meeting scaffold use requirements as outlined by OSHA and other applicable standards. Check each plank prior to use to be sure it is not warped, damaged, or otherwise unsafe.



Planks should be cleated or restrained at both ends to prevent sliding off supports if longitudinal sliding is deemed likely.

22. Install guardrail posts, guardrails, and end guardrail panels. Guardrails are required when the platform is 10 feet above the ground. Use only 8-foot or 9-foot 2x4s suitable for guardrails. 8-foot studs are too short and must not be used. DO NOT span three guardrail posts with a 16-foot guardrail.

Install toe-boards or cordon off the area around the scaffold where required. Use only 8-foot or 9-foot toe boards in each bay.



**Guardrail ends must extend 6 to 12 inches past the center of the guardrail post. DO NOT span three guardrail posts with one guardrail.**

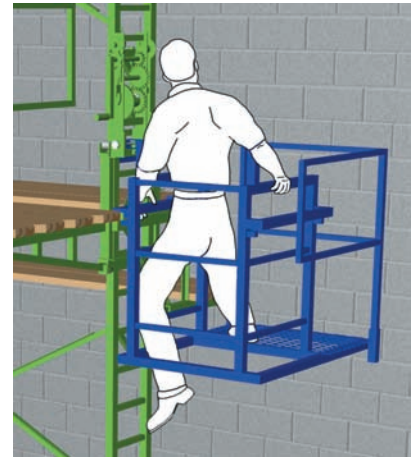
## Access

Climb the end tower to access the platform, never in the middle of the run.

Climb up PAST the work platform a few feet, move around to the other side of the tower, and then step down on the work platform.

The access landing (shown below) is used to transition from the tower to the work platform when there is less than 4 feet of tower above the work platform to access the platform as described above. That is the only time it is required.

All Non-Stop towers made after December 1, 2004 meet the letter of the integral climbing ladder standard, 1926.451(e)(6), which governs scaffold towers used for access, and are legal to climb. Older towers are currently acceptable to climb. Contact Non-Stop for details.



**NEVER CLIMB X-BRACES!**

## Tying The Scaffold To The Building Structure

The maximum working height for Non-Stop is 552 feet. No special engineering, or drawings, are required for Non-Stop structures up to 270 feet high. Anything higher than that requires our review of the job site lay-out and may require additional wall ties. In essence, the Non-Stop system is "pre-engineered" up to the maximum height. No person is allowed to specify how Non-Stop may be erected above 270 feet other than the factory, or factory representatives.

### Basic Tie-In Concepts

Non-Stop Heavy-Duty scaffolding must be tied to the structure to prevent it from tipping over. Non-Stop differs from other scaffolding in that there is only one work platform that travels up and down the towers. The type, and location, of ties depends on the height of the work platform. When using any type of winter enclosure, the scaffold must be tied more frequently due to increased loads from the effects of wind and weather against the enclosure materials. Contact Non-Stop Scaffolding or an engineer for advice.

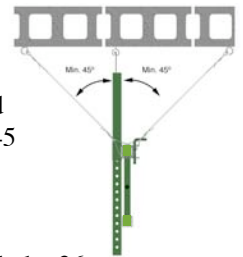
### Types Of Ties

1. **Stiff Tie.** The Non-Stop Wall Tie-In Bracket is an example of a stiff tie. It restrains the towers from moving toward, or away from, the wall. A stiff tie could also consist of two tension ties pulling in opposite directions, such as guy ropes.

2. **Tension Tie.** A tension tie pulls, but does not push, the scaffold structure. An example of a tension tie would be a guy

wire constructed of wire rope and wire rope clamps. Tension ties must be capable of withstanding a force of 1,690 pounds.

3. **Diagonal Tie.** A diagonal tie restrains the scaffold from movement parallel to the wall. It can be a stiff tie or a 2 tension ties installed between the scaffold structure and the building, pulling at least 45 degrees in the horizontal plane.



### Frequency Of Ties

The basic spacing is 14 feet horizontally by 26 feet vertically, according to the following guidelines:

4. Tie every 14 feet horizontally in **all** cases. That is, every 14 feet down the length of the wall, whether above or below the work platform. This has the net effect of tying every tower to the building structure.

5. Tie every 26 feet vertically **under** the work platform (there is one exception - item 9 explained below). Tie alternate legs as you go up. For example, if the left leg of a tower is tied at 26 feet, tie the right leg at 48 feet.

6. Tie every 45 feet (13.7m) vertically **above** the work platform. Ties above the work platform can be tension ties and are mainly stabilizing only the towers above the work platform.

7. Diagonal ties are installed **under** the work platform a maximum of every 54 feet vertically, and every 49 feet horizontally. They must be installed so that they pull against each other if they are tension ties. The angle created between the

face of the wall and the tie must be equal to, or less than, 45 degrees in the horizontal plane.

### When To Install Ties

The horizontal spacing requirement of 14 feet (4.3m) cannot be changed; however, the vertical spacing requirement of 26 feet is the maximum spacing - they can be closer. For example, when tying into brickwork, install the eye-bolt at the end of the day, even if it is only 20 feet high. That way, when the tie is fastened to the eye-bolt the next day, it will be in solid work.

**8. In Service - No Structure to tie to - any wall height up to 552 feet.** Each tower over 45 feet high must be restrained from tipping until the first tie is installed. As the work platform climbs up the towers, the scaffold must be tied to the structure as the platform passes maximum 24-foot vertical increments. No more than 45 feet of unrestrained tower sections are allowed above the work platform. When the work platform exceeds 54 feet, diagonal ties must be installed.

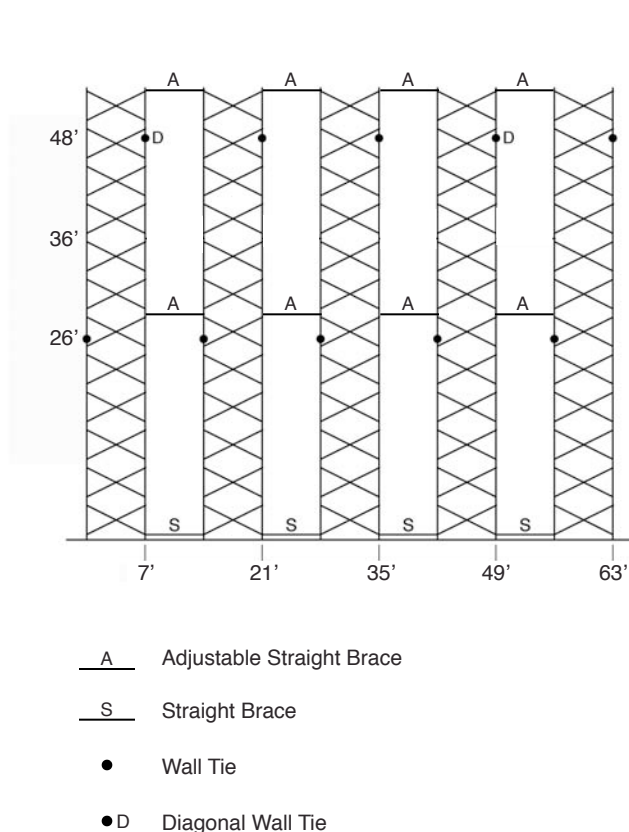
**9. In Service - Building Structure in place - maximum 45-foot wall height.** Before work commences, the scaffold is tied to the structure at the top of the tower. This configuration gives the greatest stability. The wall can be built without installing the

intermediate tie at 26 feet. The top tie must not be removed until work is complete and the work platform has been lowered below the 26-foot level. If this method is not practical, the scaffold can be tied in as work progresses exactly as in Item 5 above.

**10. In Service - Building Structure in place - any wall height up to 552 feet.** Each tower over 45 feet high must be restrained from tipping until the first tie is installed. The scaffold structure above the work platform may be as high as desired as long as it is tied according to item 6 above. As the work platform climbs up the towers, the scaffold must be tied to the structure, as in item 5 above, as the platform passes maximum 26-foot (7.3m) vertical increments.

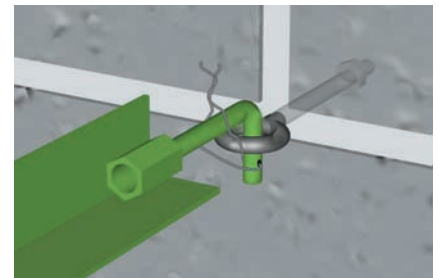
**11. Out of service - Next to the structure.** The scaffold must remain tied to the building structure as in item 6 above until the tower sections are actually being removed.

**12. Out of service - In the open.** Any scaffold towers over 18 feet high free-standing, and not in place next to a structure, must be shortened to 18 feet high and/or guyed down or otherwise restrained from tipping by high winds or other forces. This can usually be accomplished by placing a pallet of materials on the scaffold.



### Installing Wall Tie-In Brackets

1. Lay the eye-bolt into the wall adjacent to the tower. (The eye-bolt is fastened to the tie-in bracket collar to prevent loss in shipment.) The nut should be about 1/2" from the end of the eyebolt. It is OK to dip the nut and bolt in oil so it can be unscrewed easily later. Lay your eye-bolts into the wall near the end of the work day and hook the brackets on the following morning. That way you are tying into solid work.



2. Once the bricklayers' walkboards have been raised up enough to clear the eye-bolt, the tie-in bracket can be installed without climbing under the scaffold.

3. Use tie wire, or something similar to fasten the hook to the eye-bolt.

4. When lowering the scaffold, unscrew the eye-bolt from the wall and save it for the next wall.



## Raising and Lowering the Scaffold

Once the wall has reached a comfortable working height for the bricklayers, their walkboard supports can be pulled out and the walkboards dropped in place. **THE BRICKLAYERS' PULLOUTS MUST BE EXTENDED BEFORE CRANKING OR THE STRAIGHT BRACES CAN BE BENT.** After that, the laborers should raise the scaffold every two courses of block, or every five courses of brick. This will raise the scaffold in 16-inch increments.

Crank each winch about 8 inches at a time. You can crank each leg individually, or crank a group of two or more at a time. Do not crank the platform more than 8 inches out of level. Lower the scaffold the same way.



**Do not crank the platform more than 8 inches out of level!**



### CAUTION! READ THIS TO YOUR MEN!

The winch has a tremendous amount of lifting power. If it ever becomes hard to crank, **STOP AND FIND OUT WHY.** As the working platform climbs the tower, a level or a piece of material may get caught under one of the tower rungs or x-braces. If you keep cranking, **SOMETHING IS GOING TO GET DAMAGED.** Reverse the winch a few turns, correct the problem, then continue up.

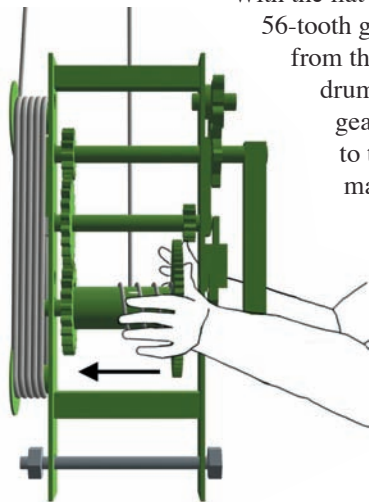
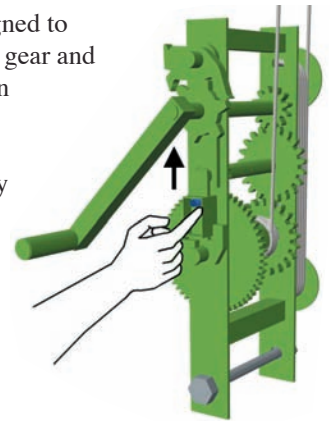
Experience has shown this is the best procedure to follow for several reasons:

- Laying five courses of brick or two courses of block uses up enough materials so they can easily be replenished with no danger of running out of anything. Simply crank the scaffold up 16 inches and call for more materials.
- Working this way, the laborers crank for 3 minutes and tend the masons for 20 minutes, so no extra manpower is required to crank the scaffold.
- Studies have shown that the strain the bricklayers experience while precisely placing a heavy masonry unit is significantly reduced when he is working waist-high. Keeping him working in this comfortable zone full-time significantly reduces back injuries.

## Shifting Gears

The two-speed winch is designed to provide great lifting power in low gear and to rapidly lower the platform when shifted to high gear.

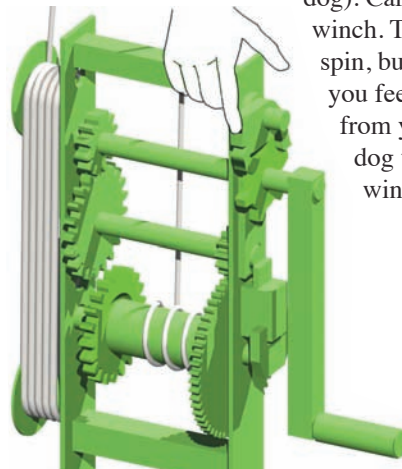
The winch is usually shipped from the factory in low gear, ready to raise the platform. To rapidly lower the platform in high gear, first lower the scaffold onto the safety catch (see p. 13). Push up on the bolt-head located behind the winch handle. This will free the winch drum.



With the flat of your palms on the large 56-tooth gear, push inward (away from the handle) until the small drum gear meshes with the gear above it. You may have to turn the handle a little to make the teeth line up properly. Lower each leg about 8 inches at a time.

## Lowering the Scaffold

Push up on the anti-reverse dog on the winch and hold it up (you may have to crank it slightly to let the pressure off the dog). Carefully reverse the winch. The winch cannot free-spin, but exercise caution! If you feel like it is getting away from you, simply let go. The dog will lock and stop the winch from moving.



**NEVER STRIKE, HIT, OR BEAT ON THE DRUM TO SHIFT THE WINCH. DOING SO MAY DAMAGE THE WINCH AND WILL VOID THE LIFETIME WARRANTY! IF THE WINCH IS DIFFICULT TO SHIFT, STOP AND FIND OUT WHY!**



**DO NOT REMOVE THE DOG OR ATTEMPT TO FREE-SPIN THE HANDLE!**



## Lowering the Scaffold Single-Cable

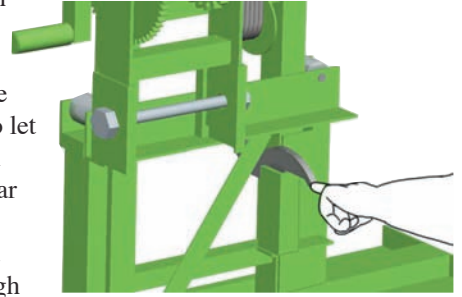
If you made a pulley jump when raising the scaffold, you can avoid having to make a pulley jump on the way down. First, clear all materials from the platform. Next, rest the weight of the platform on the safety catch. Unscrew the shackle attaching the cable eye to the side of the winch and fasten it back around the cable at the pulley. Now when you reverse the winch you can lower the scaffold the ENTIRE length of the cable rather than just half that far. When rigged single-cable, the safe capacity of the platform is only 2,000 pounds per tower.



**WARNING! DO NOT ATTEMPT TO LOWER THE SCAFFOLD SINGLE-CABLE UNTIL ALL MATERIALS ARE REMOVED FROM THE PLATFORM FIRST!**

## Pulley Jumps

On taller walls, over 36', it will be necessary to raise the pulley higher on the tower in order to top out. Manually swing the safety catch out to the locked position (drawing at right), then reverse the winch so the safety catch holds the weight of the platform. Continue reversing the winch to let out the cable. You can also shift into high gear to let the cable out quickly (see page 12). Raise the pulley as high as necessary on the tower.



Plan pulley jumps well in advance to avoid disrupting production. For example, if you see that the pulley will need to be raised 10' in order to top-out, you can do it ANY TIME after the scaffold has been raised 10'. You do not have to wait until you have cranked up almost to the top.

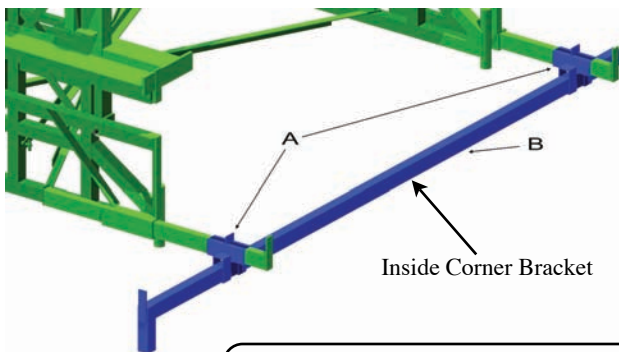


**Follow safety regulations and use appropriate fall protection equipment when climbing towers.**

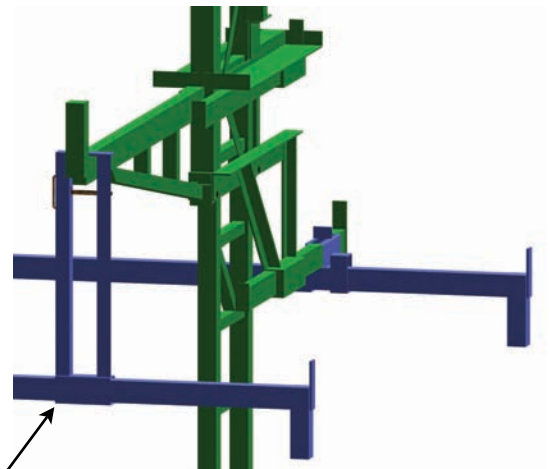
## Setting Up Inside Corners

The Inside Corner Bracket attaches to the bricklayer's pullout and supports the walkboards in the corner.

The saddle (A) slips over the bricklayer's pullouts. The arm (B) is then threaded through the lower portion of the saddle. Positioned in the corner, it supports the walkboards from the adjacent scaffold. The entire Inside Corner Bracket is installed prior to dropping the walkboards in place. The tab on the top of the saddle lies between two walkboards.



**Install Inside Corner components before landing the tower in the corner.**



Inside Corner Return

## Inside Corner Return

The Inside Corner Return allows you to build an inside corner return up to 9' long without setting another tower. It can be positioned anywhere on the laborer's side of the elevating carriage. A standard end guardrail bracket can be installed when needed.

## Landing and Stocking Materials

Non-Stop recommends landing materials **in every other bay** to avoid over-loading the scaffold. It is best to **land materials in the open bays**. That gives you more room to move around.

The maximum allowable load on the scaffold is 4,000 pounds per bay, landed in every other bay only. In all cases, do not exceed the maximum allowable load on the planks for the span used. At times, plank loading issues can be solved by doubling the planks in the landing bay. Consult your plank supplier for more information.



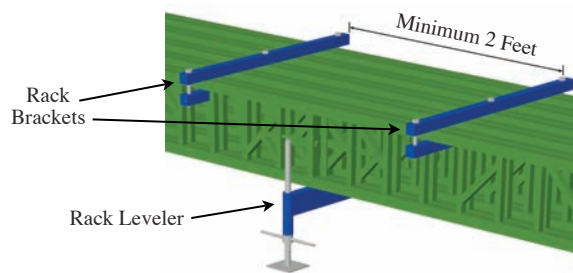
**The maximum allowable load on the scaffold is 4,000 pounds per bay, landed in every other bay only. Do not exceed the capacity of the planks for the span used.**

## Using Rack Brackets

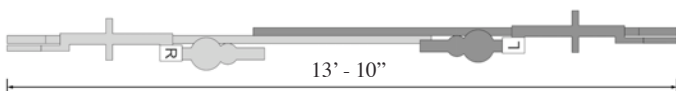
Rack Brackets clamp 10 or more Non-Stop towers together in a 4-foot wide bundle. This makes it easy to move them from job to job or on the yard with any forklift. You can rack up just the base towers or base towers with one or more extensions on them.

You will need a relatively flat working area like concrete or hard level dirt. If you don't have a flat area to arrange your towers, lay a couple of 8-foot boards on the ground about 10 feet apart. Work will go easier if you tie the carriages to the base towers with #9 wire. That way they won't roll up the tower while you're handling them. Don't crank the cable onto the winch drum. Wrap it around the spools and tie it with wire. Be sure to tie the pulleys down so they won't get loose in transport.

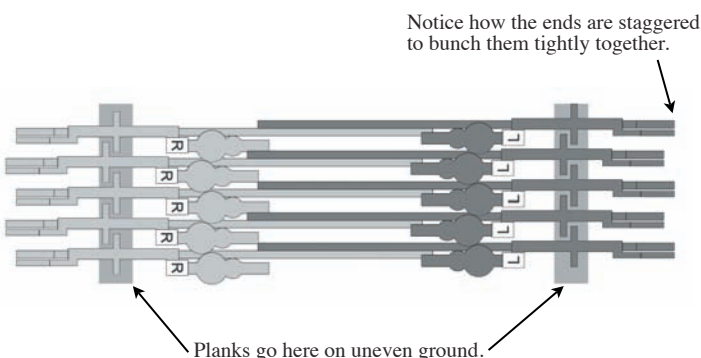
1. Put the rack leveler with two leveling jacks in the middle of your work area. Spin the jacks up until the top of the bar is about 13-1/2" above the ground.



2. Arrange a right (green) tower next to a left (red) tower exactly as shown below. The top of the green tower must go between the left winch and tower for everything to go together properly. When you have it right, the bases will be 13'-10" apart end to end, and the rungs will be side by side.



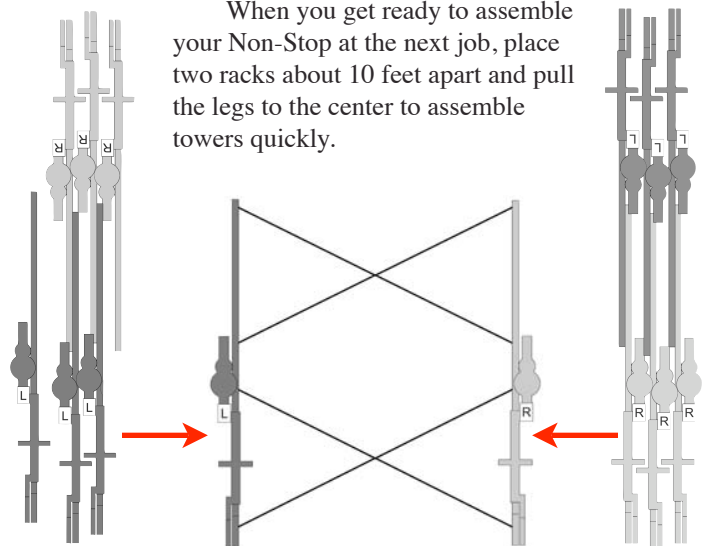
3. Place another left-right set next to the first one. Each set will be offset from the one next to it. You can get 10 legs to bunch up tightly. Let them touch each other like shown below.



4. Continue until you have 10 towers together in a bundle about 4 feet wide. Clamp the rack brackets on the towers near the carriage. **THE RACK BRACKETS MUST BE AT LEAST TWO FEET APART.** If you have an extension tower on your bases, the rack brackets will be about 11 feet apart (installed right next to the carriages). Keep the rack brackets as far apart as possible for maximum strength.

## Un-Racking

When you get ready to assemble your Non-Stop at the next job, place two racks about 10 feet apart and pull the legs to the center to assemble towers quickly.



## SAFELY LOWERING TOWERS TO THE GROUND

When you lift the towers up after they are assembled, you will notice the bottom of the tower scrapes the ground as it goes from horizontal to vertical. It doesn't work that way when you try to lay them back down. If you try to lay them down by simply booming down, the opposite of how you tilted them up, **SEVERE DAMAGE WILL RESULT. FOLLOW THE PROCEDURE LISTED HERE EXACTLY.**

To understand what can go wrong, see the diagram below. When you are lowering the tower correctly, you will see slack in the safety chain at all times.

1. Slide the Swivel Forklift Bar onto the forks and fasten the safety chain to the mast, **LEAVING A FEW INCHES OF SLACK IN THE CHAIN.**
2. Capture the tower with the Swivel Forklift Bar in a rung opening where an x-brace has been left out or removed, and no x-brace lock studs are present. Remember, you can skip one, but never two, consecutive vertical x-braces. Before lifting, be sure the towers will be bottom-heavy. **KEEP THE FORKS LEVEL.**

3. Boom out and/or roll forward to begin tipping the tower over. Avoid hitting the bottom of the tower with the forklift or the front tires. **KEEP THE FORKS LEVEL. BE SURE THE CHAIN REMAINS SLACK AT ALL TIMES.**

4. Continue rolling forward and booming down, or booming down and out, until the tower is almost horizontal (about a foot off the ground). **KEEP THE FORKS LEVEL. BE SURE THE CHAIN REMAINS SLACK AT ALL TIMES.**

**You should continue to see slack in the safety chain until step 5. If the chain is taut, you are NOT doing it correctly. Stop and correct the problem.**

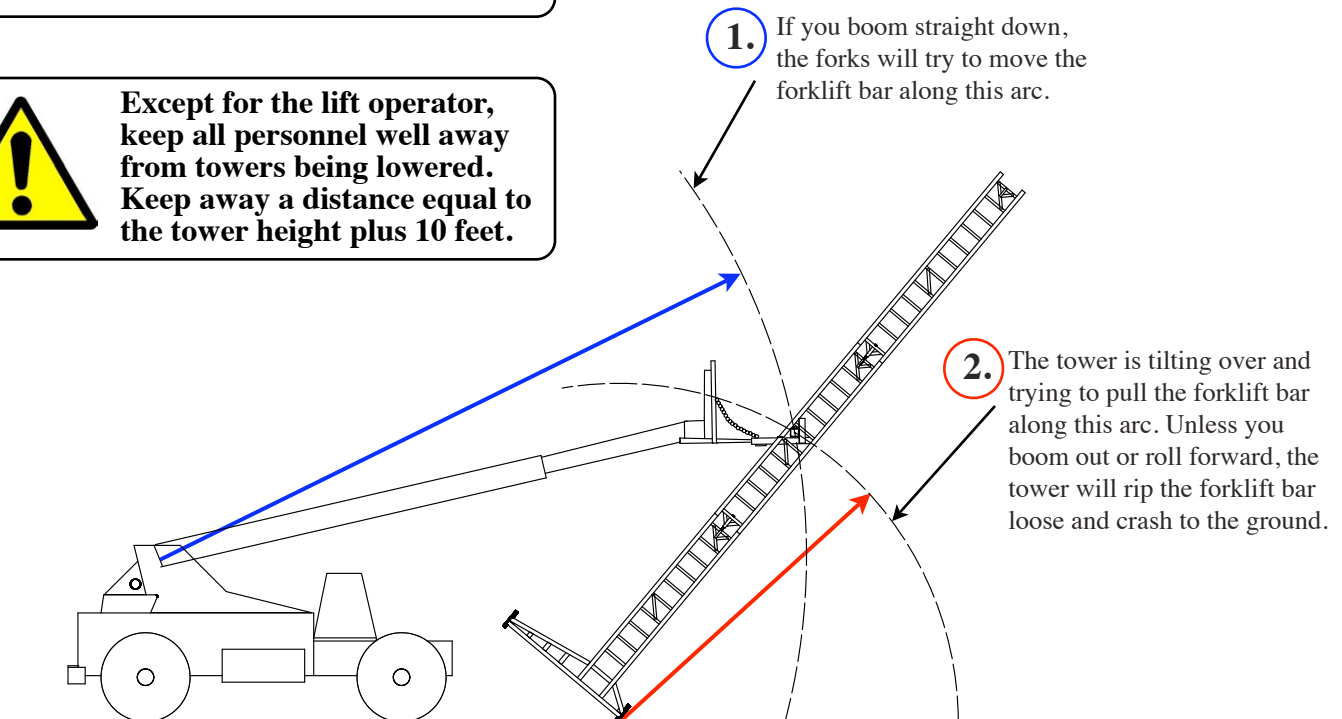
5. At this point, it may be necessary to tilt the forks forward to avoid bending an x-brace as you lower the tower the last foot or so to the ground. If the chain is tight now, it is OK.



**Be sure the towers will be bottom-heavy before lifting them.**



**Except for the lift operator, keep all personnel well away from towers being lowered. Keep away a distance equal to the tower height plus 10 feet.**



# Non-Stop Scaffolding Daily Checklist

(Photo-copy this page for daily use.)

- ☐ 1. Be sure no other personnel are working above or below the scaffold.
- ☐ 2. Be sure the foundation is solid and undisturbed, especially after rain. Clear away any snow or debris blocking your view of the base. Be sure the jacks are adequately supported.
- ☐ 3. Be sure the scaffold structure is plumb.
- ☐ 4. Be sure the scaffolding has not been altered in any way. Especially check x-bracing, wall tie-ins, and guardrails.
- ☐ 5. Check winches to be sure that the holding dog is in place. Check winches for proper up and down operation. Check cables to insure they have not been damaged.
- ☐ 6. Check all planking to insure it is installed properly and has not been altered. Be sure planks extend at least 6 inches and no more than 12 inches past the center of their supports. Be sure toe boards are installed as required. Be sure that all planks subject to longitudinal movement are cleated or restrained.
- ☐ 7. Be sure the scaffold is not overloaded. Land no more than 4,000 pounds at a time. Land materials in every other bay. Do not exceed the capacity of the planks for the span used.
- ☐ 8. Be sure the scaffold is tied in at 26-foot vertical increments, measured from the ground to the laborers' platform. Tie at 14-foot horizontal increments.
- ☐ 9. Be sure that all persons who work on the scaffold have read and understood the Assembly and Use Manual. Be sure a manual is available on the site
- ☐ 10. This checklist is not all-inclusive. Read the Assembly and Use Manual. When in doubt, ask \_\_\_\_\_, the competent person. Visit [nonstopscaffolding.com](http://nonstopscaffolding.com) for more information.
- ☐ 11. Be sure all decals are legible.
- ☐ 12. Be sure the safety catch is in place on every elevating carriage and that it moves freely.
- ☐ 13. Be sure that no parts are bent or damaged.
- ☐ 14. Be sure that walkways are not unnecessarily obstructed.
- ☐ 15. Be sure that toe boards are installed if required, or the area around the scaffold is cordoned off if required.

If any one item above remains unchecked, do not work on the scaffold until cleared by \_\_\_\_\_, the competent person.

This checklist is not intended to be all-inclusive. Read the Assembly and Use Manual. When in doubt about anything, ask the competent person before proceeding. Call Non-Stop at 800-845-0845 for advice if necessary.

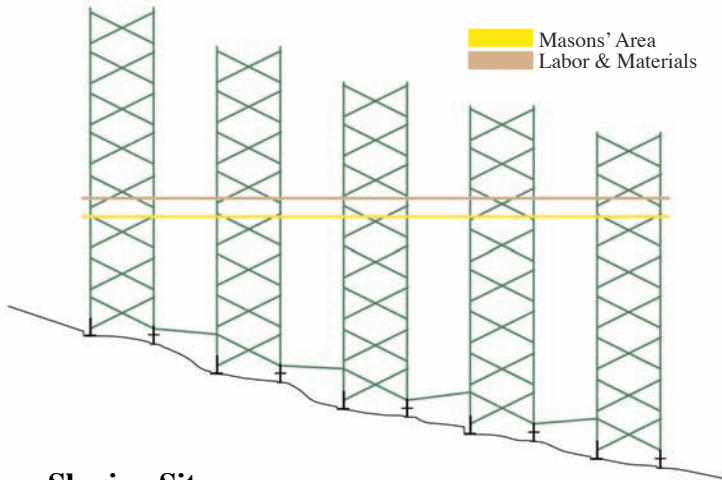
Date: \_\_\_\_\_

Checked by: \_\_\_\_\_

Location: \_\_\_\_\_

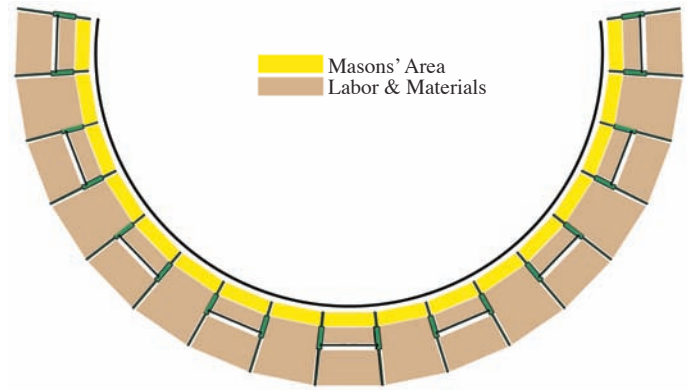


## Laying Out Non-Stop on Difficult Jobs



### Sloping Sites

This one is pretty easy. Set each tower on the ground and plumb it up. Crank the platform level.

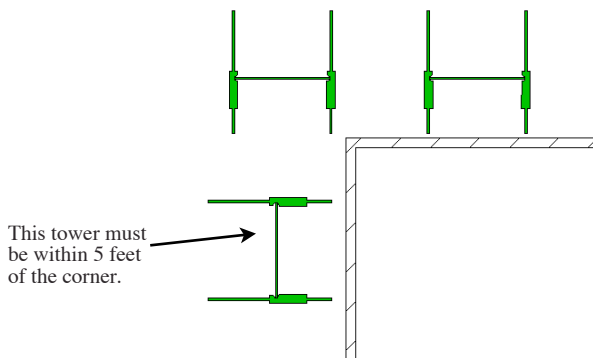


### Outside Radius

Set each leg perpendicular to the wall. Leave out the horizontal x-brace on the base tower so each tower is a little bit “pigeon-toed.” Plank the scaffold with all 9-foot or 10-foot boards (keeping a minimum 1-foot lap). If the radius is very tight, you may want to miter your cut boards. (This wall would be a nightmare with conventional frames.)

### Corners

The way to set up chopped-up walls fast is to make your corners right the first time. This is easy after you’ve done it **wrong** a few times, but here’s how to do it right the **first** time.



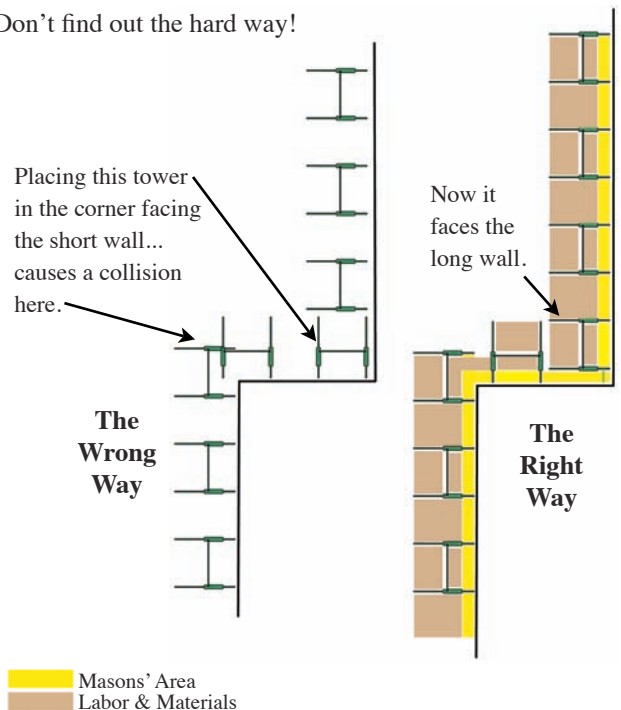
### Setting Up Outside Corners

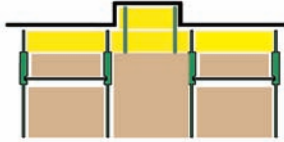
Outside corners are set up just like conventional frames. One run goes past the corner and the other run butts into it. Use two layout templates to see which way works best then mark it on your plans.

### Inside Corners

Inside corners need to be laid out on your plans with layout templates to make sure it works right the first time. Here’s an example of the wrong way and right way to set up identical walls.

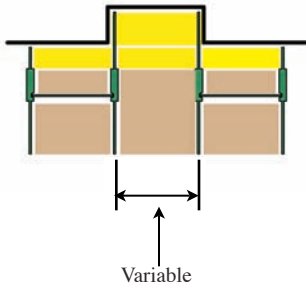
Don’t find out the hard way!



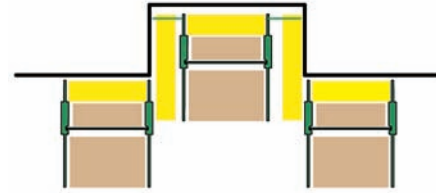


**Insets** up to 30 inches deep, wherever they land, can be planked using pilaster brackets. They extend the masons' walk surface out an additional 24 inches.

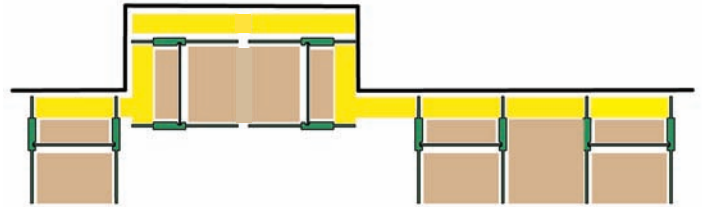
Yellow Masons' Area  
Brown Labor & Materials



**Insets** up to 36 inches deep can be planked by using optional 5-board pullouts for the masons' walkboards and placing your towers by the insets.



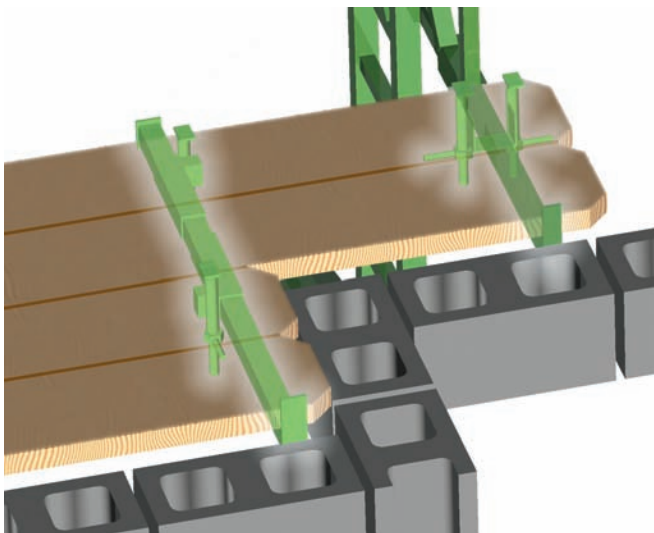
**Wider Insets** can be planked using double Inside Corner Brackets and Returns.



#### Deep Insets

It's easy to put towers into insets, or even turn them sideways (as shown here) to make the planking work correctly.

### Typical Pilaster Bracket Installation



## Assembly, Use, and Safety Manual Quiz

This quiz is given to be sure you have read and understood the key points contained in this manual.

Circle the correct answer and check your answers against the answer key on the last page. If you miss any questions, tell your trainer or the competent person and have them explain the correct answer to you. Put your initials next to any question you missed after you understand why you missed it.

At the end of the test, sign and date it, cut it out along the dotted line, and give it to your employer.

1. If you need a copy of the Non-Stop Scaffolding Assembly and Use Manual you can: (cover)
  - a) Call Non-Stop Scaffolding and we will mail you one.
  - b) Print one from our website at nonstopscaffolding.com
  - c) Both a and b
2. What is the maximum working height of Non-Stop Heavy Duty? (p. 2)
  - a) 100 feet
  - b) 137 feet
  - c) 552 feet
3. Where should the Non-Stop Heavy-Duty Scaffolding Assembly, Use, and Safety Manual be kept? (p. 3)
  - a) In the foreman's truck.
  - b) On the job site at all times.
  - c) At the home office.
4. Erection, use, and dismantle of Non-Stop must be supervised by: (p. 3)
  - a) a competent person trained on Non-Stop scaffolding.
  - b) Someone with the authority to halt work if there is a problem.
  - c) Both a and b.
5. In what location should the cross brace be left out for the forklift bar? (p. 5)
  - a) The very top
  - b) 2 braces from the bottom
  - c) At least halfway up (from the bottom)
6. Do not use a forklift to lift towers over: (p. 6)
  - a) 27 feet (Base and 2 extensions)
  - b) 45 feet (Base and 4 extensions)
  - c) 54 feet (Base and 5 extensions)
7. When installing the pulley, mount it: (p. 6)
  - a) Half-way up.
  - b) Three-quarters of the way up.
  - c) As high as possible.
8. Does Non-Stop require the use of mud sills? (p. 7)
  - a) Yes
  - b) No
9. Can Non-Stop towers be spaced closer than 7 feet? (p. 7)
  - a) Yes
  - b) No
10. When placing Non-Stop towers at the wall, the masons walkboards must be no farther than: (p. 8)
  - a) 3 inches from the wall.
  - b) 12 inches from the wall.
  - c) 14 inches from the wall.
11. When placing Non-Stop towers at the wall, you must connect them together at the bottom with a straight brace, and again with an adjustable straight brace every: (p. 8)
  - a) 27 feet of height.
  - b) 36 feet of height.
  - c) 45 feet of height.
  - d) 54 feet of height.
12. When starting from the ground, surplus winch cable should be: (p. 9)
  - a) wound off on the spools on the side of the winch.
  - b) cranked onto the winch drum.
  - c) stored neatly on the scaffold.
13. Planks used on Non-Stop should be: (p. 9)
  - a) at least as good as you find at a good lumber yard like Home Depot.
  - b) 2x8s or 2x10s with no knots.
  - c) rough sawn lumber at least 6 inches wide.
  - d) boards certified for use as scaffold planks.
14. The ends of the planks on Non-Stop, must extend: (p. 9)
  - a) at least 2 inches past the center of the board support.
  - b) at least 6 to 12 inches past the center of the support.
  - c) no more than 1/4 inch past the support so it is as flush as possible.
15. The plank overlap in the middle of a run must be: (p. 9)
  - a) at least three times the board thickness.
  - b) at least 12 inches (and six inches past the center of their support).
  - c) at least 16 inches, and no more than 4 feet.
16. Where is it recommended to climb Non-Stop Scaffolding? (p. 10)
  - a) Only on the ends
  - b) Only where it turns a corner
  - c) In the middle of a run
17. Guardrails are required when the work platform reaches: (p. 10)
  - a) 4 feet high.
  - b) 6 feet high.
  - c) 10 feet high.
  - d) 12 feet high.

18. When installing 2x4 guardrails, use: (p. 10)

- a) 16-foot 2x4s.
- b) 12-foot 2x4s.
- c) 8- to 9-foot 2x4s.

19. The Access Landing is required when the scaffold tower extends less than: (p. 10)

- a) 4 feet above the laborers' platform.
- b) 7 feet above the laborers' platform.
- c) 12 feet above the laborers' platform.

20. When accessing Non-Stop you can climb the x-braces : (p. 10)

- a) when the climbing height does not exceed 15 feet.
- b) when there are no materials stocked over the climbing area.
- c) never.

21. When tying Non-Stop to the wall, the first tie should be installed when the work platform reaches: (p. 10)

- a) 32.5 feet (5 times the base width).
- b) 26 feet (4 times the base width).
- c) 19.5 feet (3 times the base width).

22. After the first tie is installed, Non-Stop must be tied to the building: (p. 10)

- a) every 10 to 12 feet vertically.
- b) every extension tower.
- c) every 26 feet vertically.
- d) every 36 to 40 feet vertically.

23. Non-Stop must be tied to the building horizontally: (p. 10)

- a) every 7 feet (every leg).
- b) every 14 feet (every other leg).
- c) every 35 feet and every end.

24. To properly tie the scaffold on a wall over 45 feet tall, you should: (p. 11)

- a) Just add a few extra wall ties
- b) Use Non-Stop's tie-in guidelines for walls over 45 feet
- c) Follow the standard wall tie recommendations for conventional frames.

25. When raising and lowering the work platform: (p. 12)

- a) crank each leg as high as possible and go to the next.
- b) crank each leg no more than eight inches and go to the next.
- c) crank two or more winches simultaneously, but no more than 8 inches.
- d) Both b and c.

26. What is the maximum load capacity of Non-Stop Heavy-Duty scaffolding? (p. 14)

- a) 3,000 pounds
- b) 2,500 pounds
- c) 4,000 pounds

27. Materials should be landed on Non-Stop: (p. 14)

- a) only on the ends of the scaffold
- b) in the open bays
- c) only in every other bay.
- d) both b and c

Sign here: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Instructor: \_\_\_\_\_

Answer key:  
1. c 15. b  
2. c 16. a  
3. b 17. c  
4. c 18. c  
5. c 19. a  
6. b 20. c  
7. c 21. b  
8. a 22. c  
9. a 23. b  
10. c 24. b  
11. a 25. d  
12. a 26. c  
13. d 27. d  
14. b