3. The Shore "X"® System & Components

The SHORE "X"® system has been designed to simplify the shoring of construction projects. The primary advantages of the SHORE "X" system are its extra carrying capacity, complete range of height adjustments, the need for fewer types and sizes of components, and maximum flexibility to meet varying job conditions.

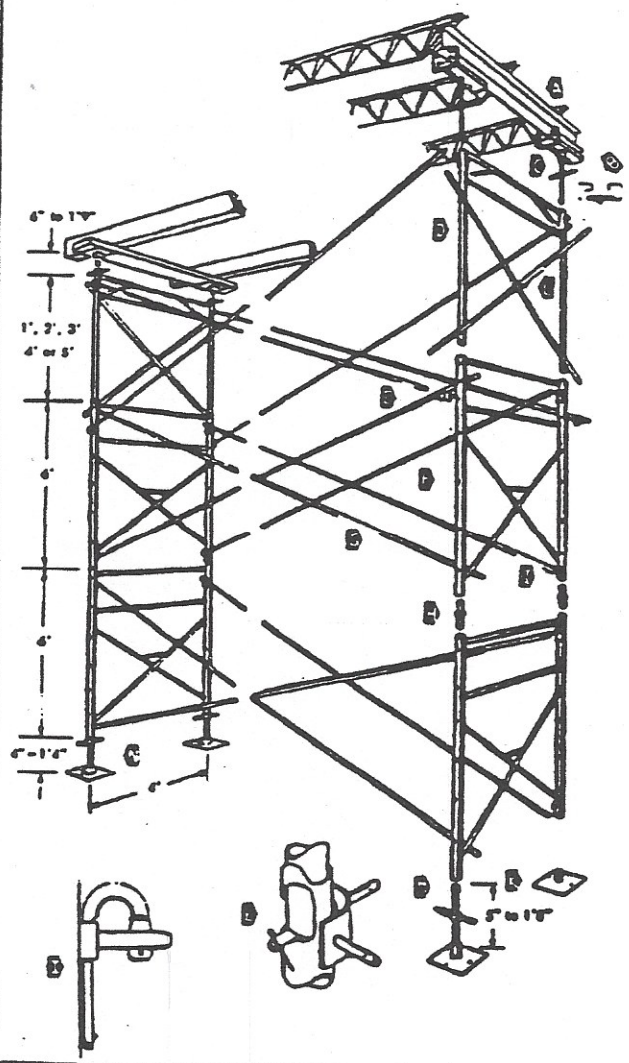
Fewer types and sizes of components. Only Base and Extension Frames are used with same size crossbrace to erect a tower of any height. The Extension Frame, which adjusts at one foot intervals, eliminates odd size frames and crosses – cutting total number of component sizes 40%.

Increases efficiency of horizontal shoring. 11K allows the towers to be of the size (i.e., 4' x 10') best suited for the efficient span of the horizontal beam. The towers are spaced to insure economic loading. This enables the contractor to take full advantage of both horizontal and vertical shoring systems.

Lower labor costs. The flexibility of SHORE "X" reduces the man–hours required to design, lay out, supervise and erect the shoring. Fewer towers means less labor. Since all height adjustments are made with top frames and screw jacks, crews can proceed with erection without being concerned with sorting the many combinations of frame sizes and crosses required with other methods.

Reduces cartage and maintenance costs. The reduced number of components used with SHORE "X" 25K lowers cartage and warehousing costs.

Use it on all those tough–to–shore jobs—bridges, beams, slopes, slabs, commercial, industrial—where you need a shoring that carries 25,000 lb./leg frame



SHORE "X" 11KIP SYSTEM

The Fully Braced Adjustable Shoring system

A 4" x 8" Steel Junior Beams.

B Beam Clamps (4447-00) secure the beam to the "J" head.

C "J" Headed Screw Jacks (2621-00) give easy height adjustment

D Extension Frames (2450-00—4' x 5'4") telescope into Base frames to give height adjustments of 1 ft., 2 ft., 3 ft., 4 ft.—and 5 ft. This adjustability eliminates the need for 2 ft., 3 ft., 4 ft., and 5 ft. frames, their various cross sizes, and extension sleeves.

E Adapter Pins (2001-00) fit into holes on legs of Base Frames, support the Extension Frames at the desired height adjustment, and provide attachment points for crosses.

F Base Frames (2460-00—4' x 6') "X" braced design. Holes in legs receive Adapter Pins at any desired level of adjustment.

G Cross Braces. Only one size of side cross braces is required for both Base and Extension Frames.

H Coupling Insert Pins (2023-00) provide alignment of Base Frames and can be bolted through holes in legs of Base Frames to permit hoisting of assembled towers.

I Speed-Locks provide fast, trouble-free attachment of cross bracing.

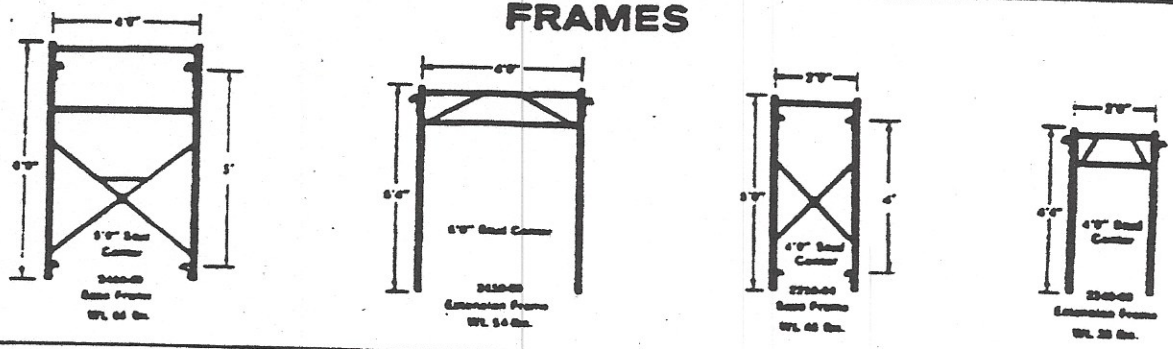
K End Cross Brace (2045-00) always used at 3'-0", 4'-0", 5'-0" Extension, 4'-0" Frame only.

L The Cap (2623-01) combined with the collar on the jack handle, provides positive alignment in the legs of the Base Frames.

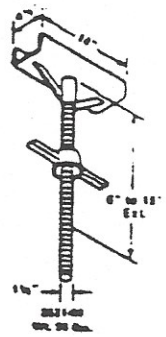
M Swivel-Based Screw Jacks (2619-00), with 8 inch by 8 inch swivel plates, compensate for uneven ground conditions, eliminating wedging, and give easy 12 inch height adjustment. (Add 2623-01 when used with 2⅜" frame.)

3. The Shore "X"® System & Components (Con't)

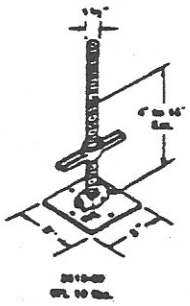
FRAMES



"J" HEAD SCREW JACK



SWIVEL SCREW JACK



CROSS BRACES

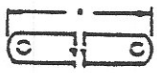
4' WIDE FRAMES

Part No.	Size	X	Wt. (lbs.)
2045-00	4'±5"	78¼	10
2065-00	6'±5"	95¼	12½
2085-00	8'±5"	115¾	15½
2105-00	10'±5"	136¼	18

COUPLING INSERT PIN

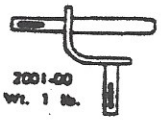
2023-00
Wt. 2 lbs.

BAR BRACE



8½" #2650-00

ADAPTER PIN



2001-00
Wt. 1 lb.

BASE PLATE

2060-00

BEAM CLAMP

4447-00
Wt. 2½ lbs.

SCREW JACK ALIGNMENT CAP

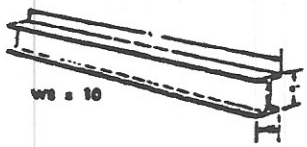
Wt. ½ lb.
Converts 2621-00, 2619-00 & 2600-21 Screw Jacks to fit 2½" tube.

2623-01

TIMBER BRACING CLAMP

2220-00
Wt. 2½ lbs.

STEEL JUNIOR BEAMS



Wt. = 10

Part No.	L	Wt. (lbs.)
2004-00	4'	40
2006-00	6'	60
2008-00	8'	80
2010-00	10'	100
2012-00	12'	120
2014-00	14'	140

Aligning caps must be used when jacks are inserted in either top or bottom of Base Frames

Adapter pins and side crosses must be used at all times with Extension Frames. Side crosses assure proper position of adapter pins. Pin must be held in position with an 8d duplex nail. Both legs of Extension Frames must rest on Adapter Pins.

Side Crosses assure proper placement of adapter pins. Side crosses must be placed at all times including one foot extension of extension frames. End crosses must be placed when extension frame is extended 3', 4', or 5'

"J" HEAD SCREW JACKS

Beam placement. 4 x 8 junior beams must be butted within 2" of the center of the "J" Head. Maximum space between butted beams must not exceed 4"

Beam Clamp placement. Clamps must be placed on each end of the beam. When horizontal Quickbeams are placed on only one side of beam, beam clamps must be placed on every jack screw to minimize possibility of beam rotation

Horizontal Quickbeam bearing prongs must bear fully on the 4 x 8 Junior Beam

SAFETY RECOMMENDATION

Follow local codes, ordinances and regulations pertaining to shoring and steel forms. Inspect all equipment before using. USER IS RESPONSIBLE for equipment damaged in handling, overloading or misuse in any way whatsoever. Do not exceed manufacturer's recommended safe working loads for both shoring and forms. Special consideration must be given to the proper design of footing support for these towers. Engineer should check wind load.

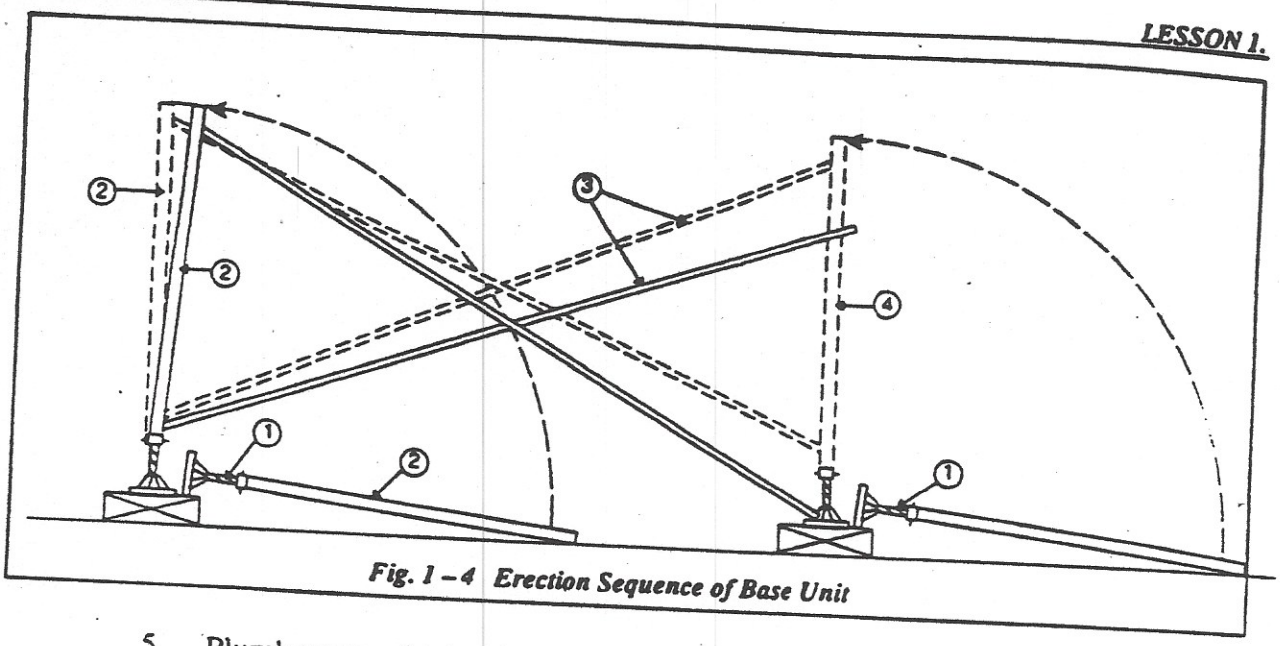


Fig. 1 – 4 Erection Sequence of Base Unit

5. Plumb tower with hand level – – 1 man operation. (See Fig. 1–5)
   a. Check to see that Screw Jacks are exactly spaced 10′ center to center (or applicable distance, depending upon cross size.)
   b. Plumb with bottom jacks (top jacks are used for grading the deck). One complete turn of the jack handle equals ¼″ up or down.
   c. Plumbing sequence.
      1. Plumb leg 1 of frame A.
      2. Plumb leg 2 of frame B.
      3. Plumb leg 3 of frame B.
      4. Check leg 4 of frame A.

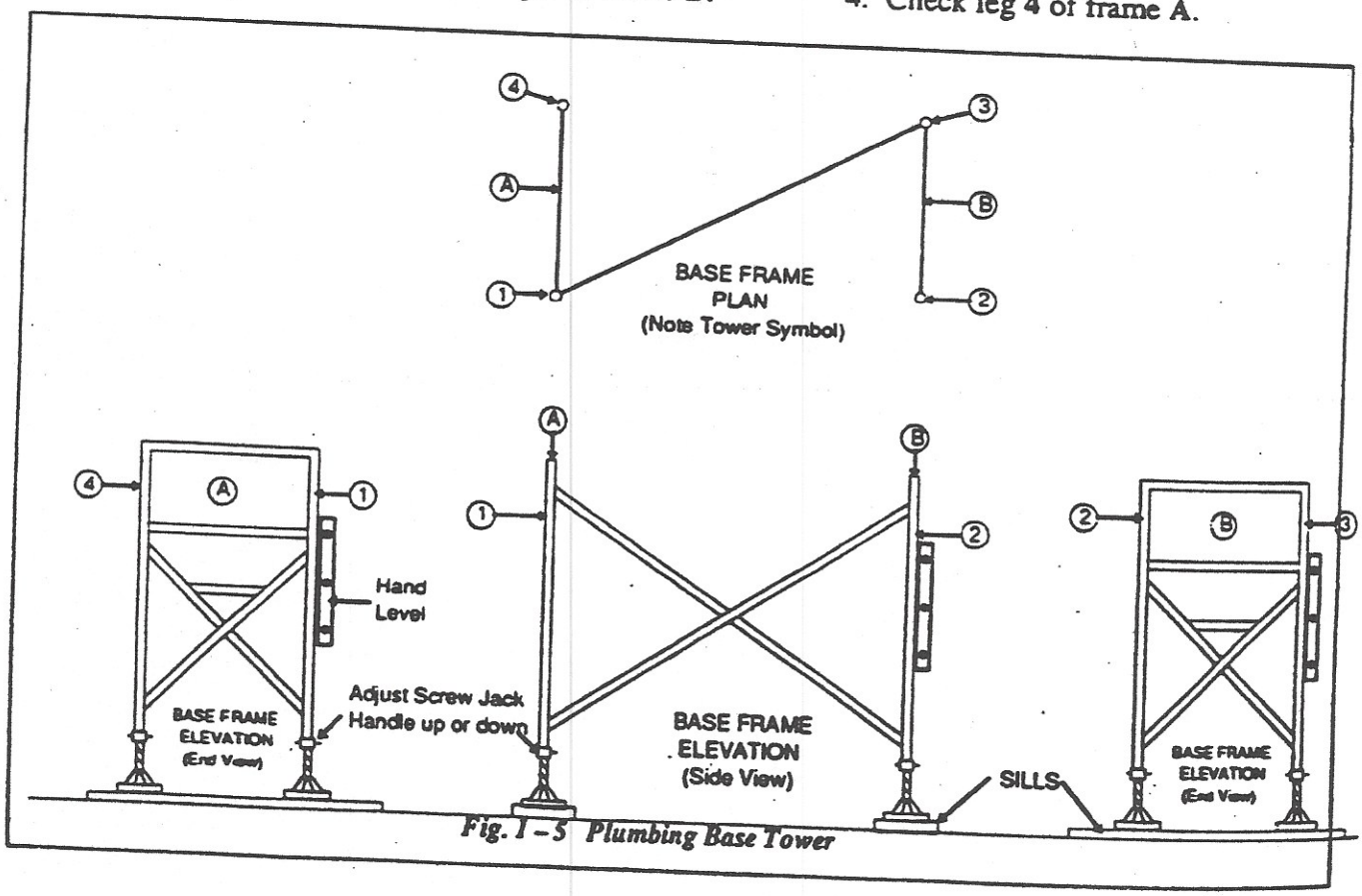


Fig. 1 – 5 Plumbing Base Tower

STEP 3. – Erection of 3rd lift or Extension frames – – 2 man operation.

3rd lift extension frame components:

2 each Extension Frames	2 each Cross Braces
2 each Cross Braces	4 each Adapter Pins
2 each 12′ Planks	

1. Distribute 3rd lift components.
   a. Components distributed with 2nd lift components.
2. Erection of 3rd lift extension frames – – 2 man operation.
   a. 2 men on plank P1 raise plank P2 and place in center of tower across top rung of 2nd lift frames B and C. (See Fig. 1–8)

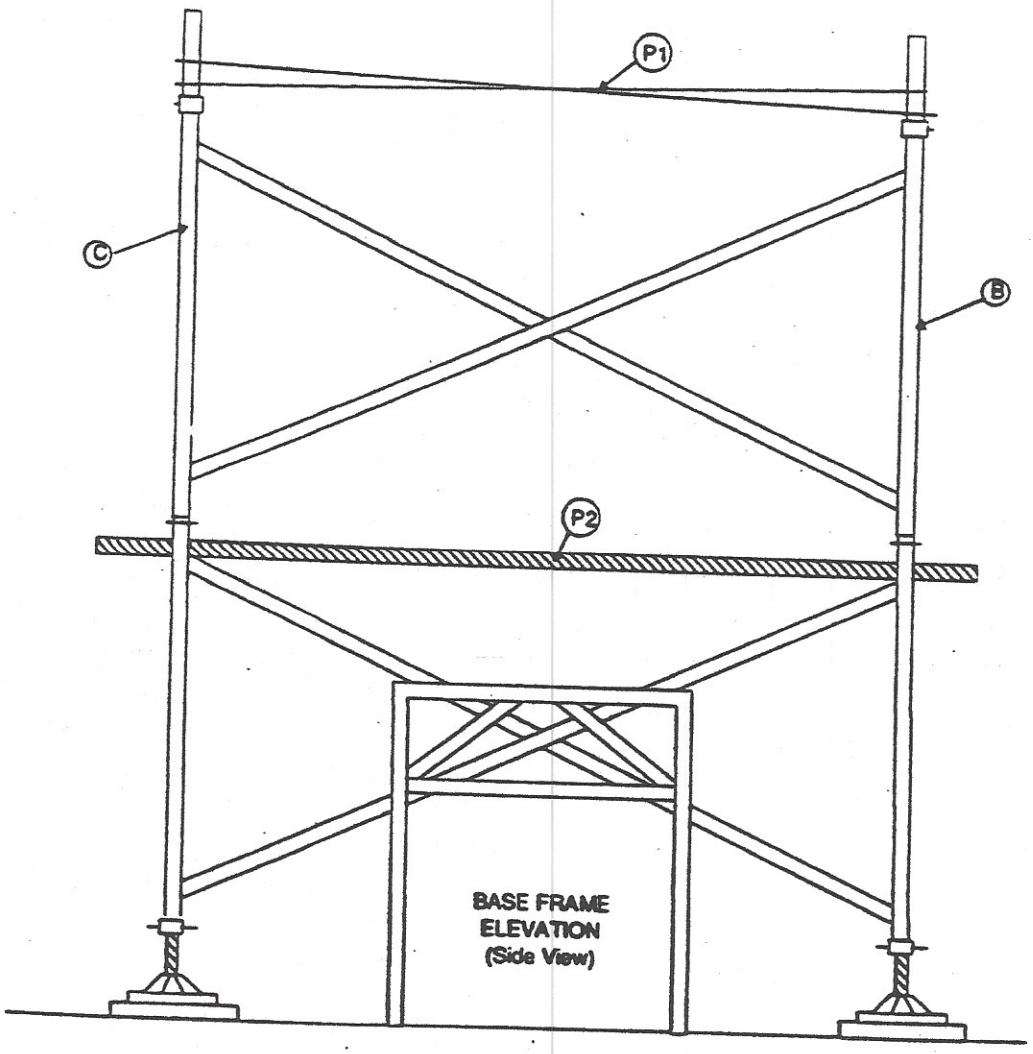


Fig. 1 – 8 Erection of 3rd Lift of Base Frame or Extension Frame

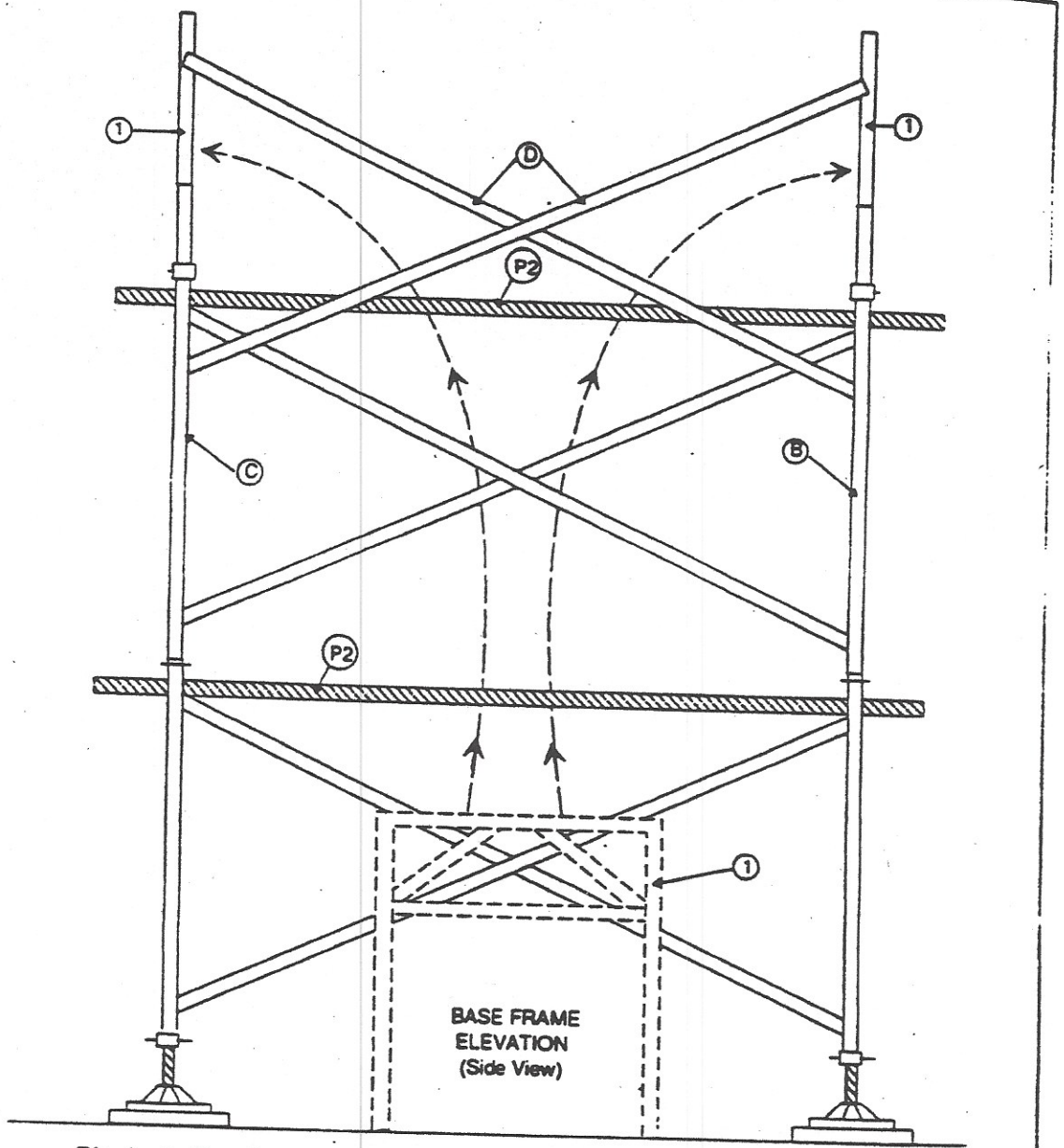


Fig. 1 – 9 Erection of 3rd Lift of Base Frame or Extension Frame Completed

Important

b. 2nd man on plank **P1** hands frames or extensions **1** to man on plank **P2** for setting. (see Fig. 1–9)

c. Install two cross braces **D**

d. End cross braces, screw jacks and wood caps can now be installed.

STEP 4. – Erection of more than 3 frames – – 3 man operation.

1. If only 4 frames high, erect the entire tower, then brace. If 4 frames high or more, erect to 3 frames high and install bracing to stabilize the towers. (see Section 10).

SAFETY CHECKS FOR SHORE "X"

1. Design Check

   A. Do not start erection until design has been checked for proper tower loadings and lumber stresses and all codes.

   B. If any field deviation is necessary, the project engineer should be consulted.

2. Ground

   A. Sills must be adequate to support loads imposed by falsework design.

   B. Special consideration should be given to back filled or weak bearing soils, wet or muddy soil conditions and slopes.

   C. Check also for possible washouts due to rain.

3. Equipment Check

   A. All equipment must be checked to see that it is in proper working condition.

4. Screw Jacks

   A. Screw jacks must always be plumb and straight.

   B. Aligning cap (caps) must be used when jacks are inserted in either top or bottom of base frames.

   C. All screw jacks must be seated securely against the legs of the frame.

5. Adapter Pins

   A. Adapter pins must be used at all times with extension frames. Side crosses assure proper position of adapter pins. Pins should be held in position with an 8d duplex nail.

6. Cross Bracing

   A. Cross braces must be properly attached to all bracing points. No braces should be left out. End cross braces must be placed as required.

7. Extension Frames

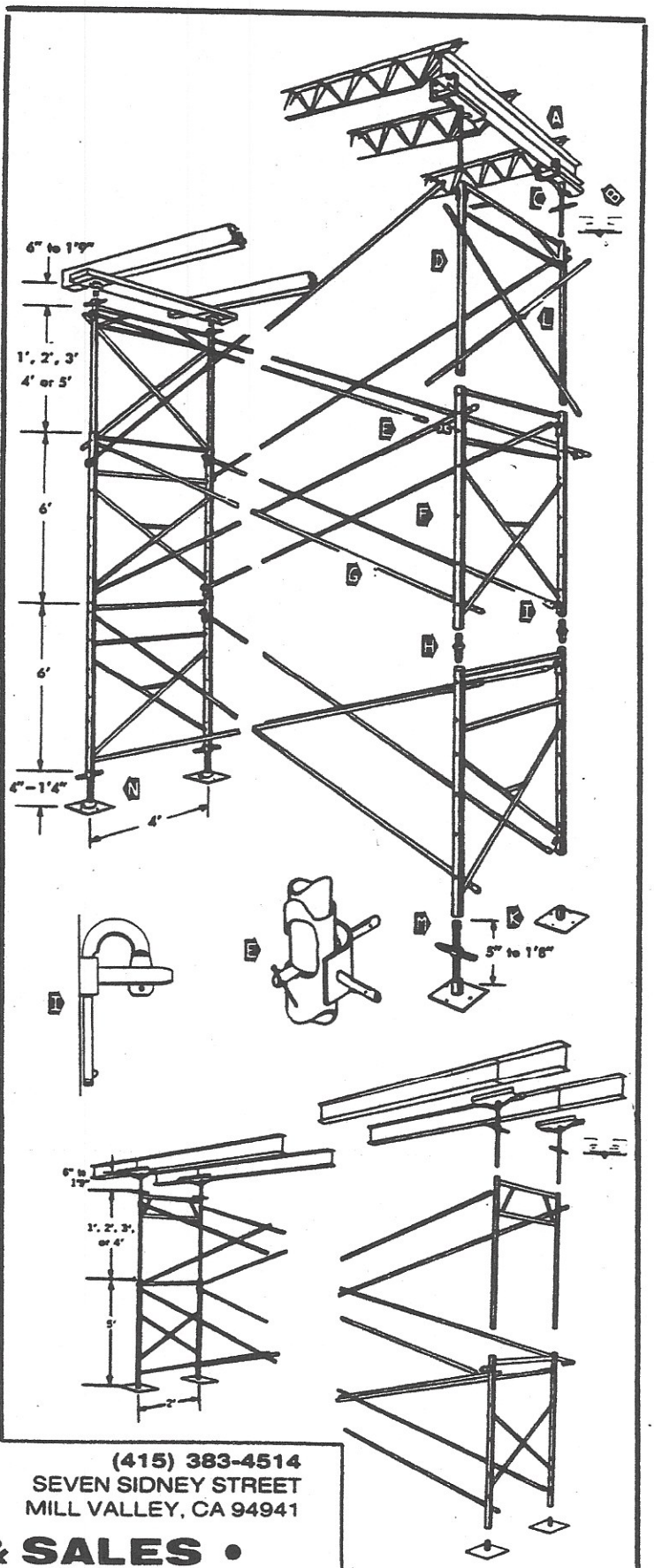
   A. Extension frames must rest on adapter pins. Side cross braces assure proper placement of adapter pins. Side cross braces must be placed at all times, including on the extension frame at all extensions.

8. Plumbness

   A. Shoring towers must be plumb in both directions.

SHORE "X"

The fully braced adjustable shoring system



- **A** **4" x 8" Steel Junior Beams.**
- **B** **Beam Clamps** (4447-00) secure the beam to the "J" head.
- **C** **"J" Headed Screw Jacks** (2621-00) give easy height adjustment.
- **D** **Extension Frames** (2450-00—4' x 5'4") telescope into Base frames to give height adjustments of 1 ft., 2 ft., 3 ft., 4 ft.—and 5 ft. This adjustability eliminates the need for 2 ft., 3 ft., 4 ft., and 5 ft. frames, their various cross sizes, and extension sleeves.
  Adapter Pins (2001-00) fit into holes on legs of Base Frames, support the Extension Frames at the desired height adjustment, and provide attachment points for crosses.
- **F** **Base Frames** (2460-00—4' x 6') "X" braced design. Holes in legs receive Adapter Pins at any desired level of adjustment.
- **G** **Cross Braces.** Only one size of side cross braces is required for both Base and Extension Frames.
- **H** **Coupling Insert Pins** (2023-00) provide alignment of Base Frames and can be bolted through holes in legs of Base Frames to permit hoisting of assembled towers.
- **I** **Speed-Locks** provide fast, trouble-free attachment of cross bracing.
- **K** **End Cross Brace** (2045-00) always used at 3'-0", 4'-0", 5'-0" Extension. 4'-0" Frame only.
- **L** **The Cap** (2623-01) combined with the collar on the jack handle, provides positive alignment in the legs of the Base Frames.
- **M** **Swivel-Based Screw Jacks** (2619-00), with 8 inch by 8 inch swivel plates, compensate for uneven ground conditions, eliminating wedging, and give easy 12 inch height adjustment. (Add 2623-01 when used with 2⅜" frame.)

C/E CONSTRUCTION ENTERPRISES, INC.

(415) 383-4514
SEVEN SIDNEY STREET
MILL VALLEY, CA 94941

• SHORING RENTALS & SALES •

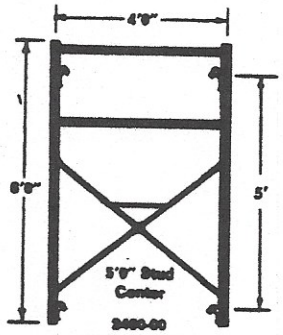
• STEEL FORMS •

• CONSTRUCTION MATERIALS •

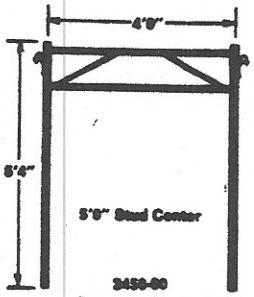
2 Foot Wide Shore "X" Towers

Shore "X" basic units and accessories

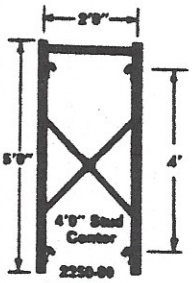
FRAMES



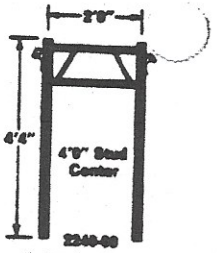
2400-00
Base Frame
Wt. 65 lbs.



2450-00
Extension Frame
Wt. 54 lbs.

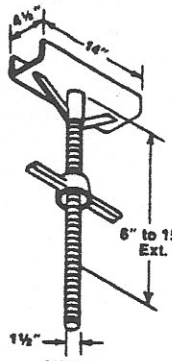


2250-00
Base Frame
Wt. 46 lbs.



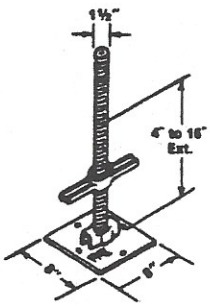
2240-00
Extension Frame
Wt. 28 lbs.

"J" HEAD SCREW JACK



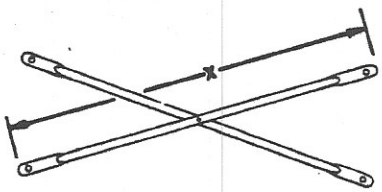
2621-00
Wt. 25 lbs.

SWIVEL SCREW JACK



2619-00
Wt. 19 lbs.

CROSS BRACES



4' WIDE FRAMES

Part No.	Size	X	Wt. (lbs.)
2045-00	4'x5'	78 13/16	10
2065-00	6'x5'	95 13/16	12½
2085-00	8'x5'	115⅝	15½
2105-00	10'x5'	136⅛	18

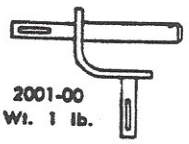
COUPLING INSERT PIN

2023-00
Wt. 2 lbs.

BAR BRACE

8½" #2850-00

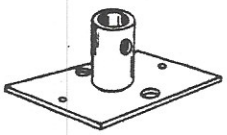
ADAPTER PIN



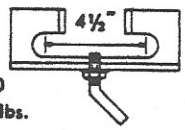
2001-00
Wt. 1 lb.

BASE PLATE

2088-00



BEAM CLAMP



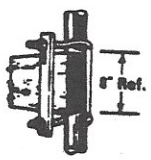
4447-00
Wt. 2½ lbs.

SCREW JACK ALIGNMENT CAP

Wt. ½ lb.
Converts 2621-00, 2619-00 & 2600-21 Screw Jacks to fit 2⅜" tube.

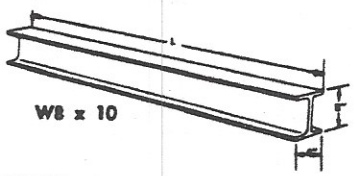
2623-01

TIMBER BRACING CLAMP



2230-00
Wt. 2½ lbs.

STEEL JUNIOR BEAMS



Part No.	L	Wt. (lbs.)
2004-00	4'	40
2006-00	6'	60
2008-00	8'	80
2010-00	10'	100
2012-00	12'	120
2014-00	14'	140

Aligning caps must be used when jacks are inserted in either top or bottom of Base Frames.

Adapter pins and side crosses must be used at all times with Extension Frames. Side crosses assure proper position of adapter pins. Pin must be held in position with an 8d duplex nail. Both legs of Extension Frames must rest on Adapter Pins.

Side Crosses assure proper placement of adapter pins. Side crosses must be placed at all times including one foot extension of extension frames. End crosses must be placed when extension frame is extended 3', 4', or 5'.

"J" HEAD SCREW JACKS

Beam placement. 4 x 8 junior beams must be butted within 2" of the center of the "J" Head. Maximum space between butted beams must not exceed 4".

Beam Clamp placement. Clamps must be placed on each end of the beam. When horizontal Quickbeams are placed on only one side of beam, beam clamps must be placed on every jack screw to minimize possibility of beam rotation.

Horizontal Quickbeam bearing prongs must bear fully on the 4 x 8 Junior Beam.

SAFETY RECOMMENDATION

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