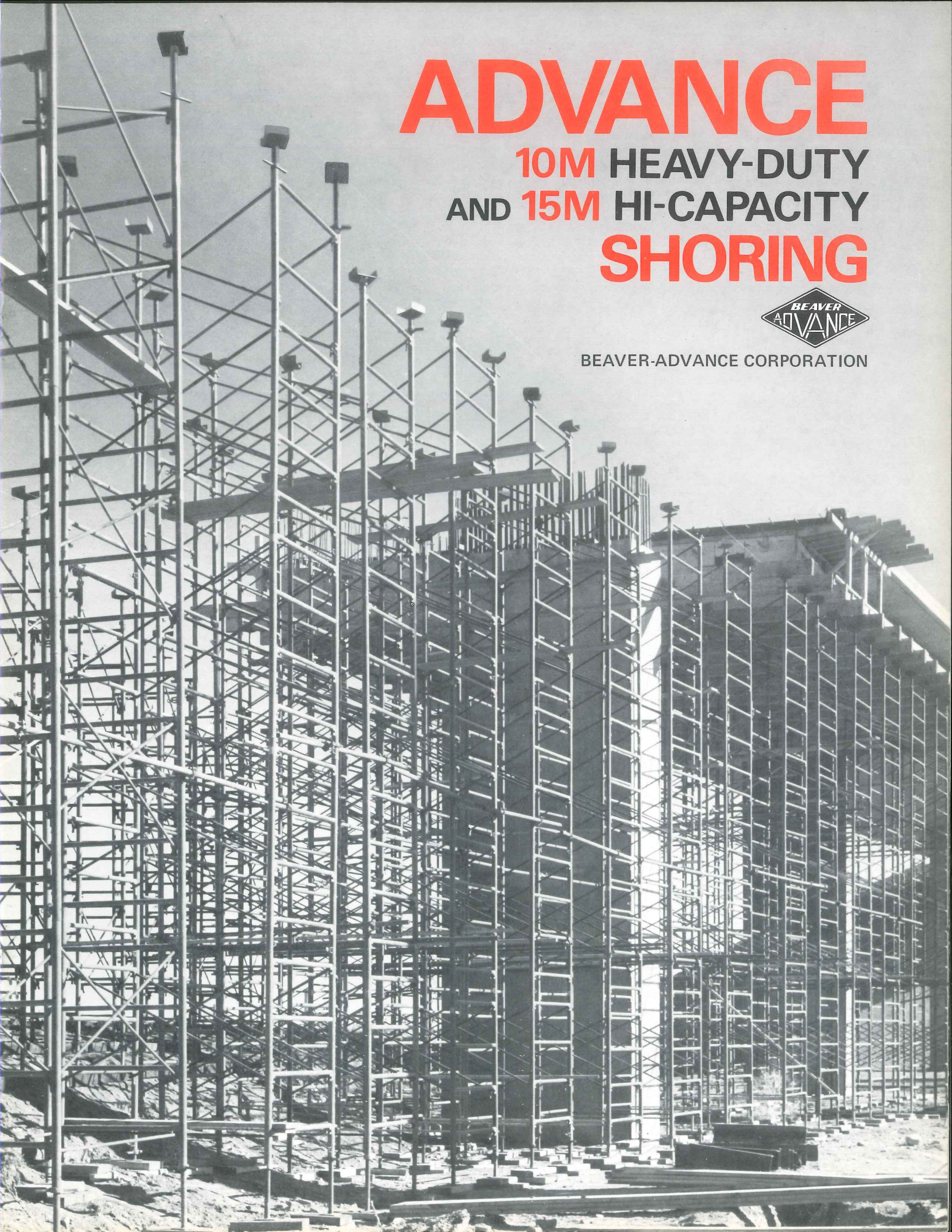


# ADVANCE

10M HEAVY-DUTY  
AND 15M HI-CAPACITY  
SHORING



BEAVER-ADVANCE CORPORATION



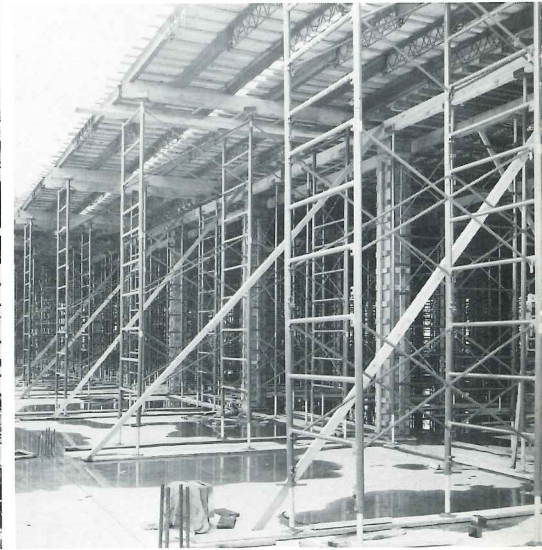
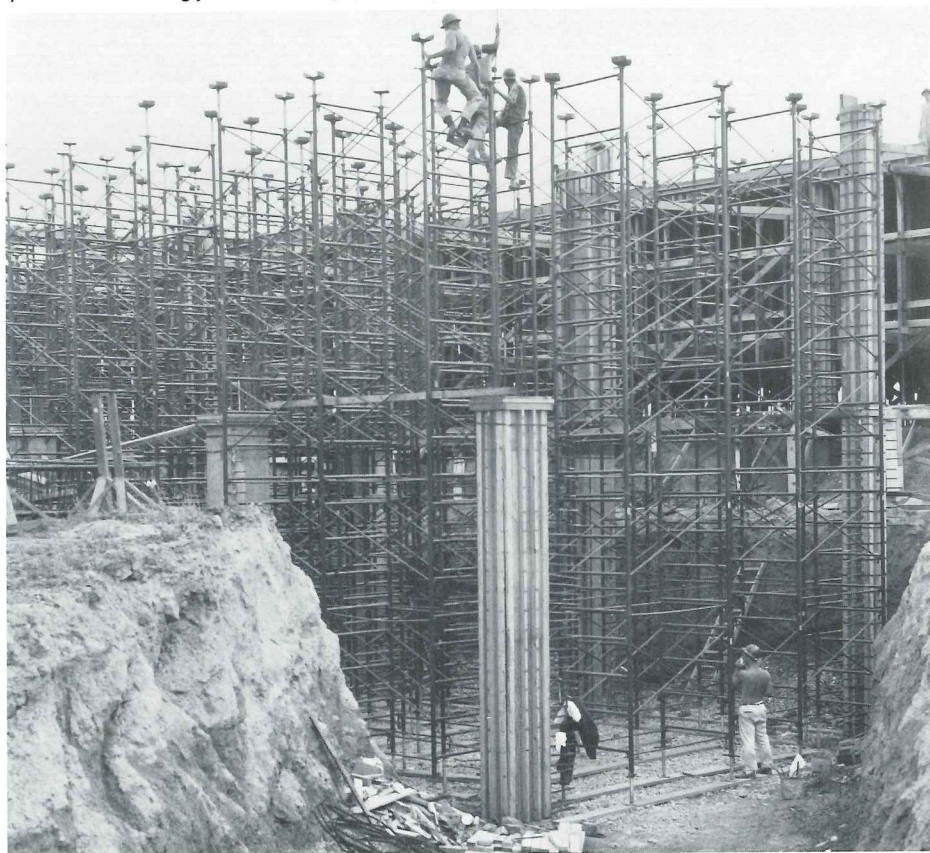


# Advance 10M Heavy-Duty and 15M Hi-Capacity Shoring

... A standard of excellence in the shoring industry. Exclusive design features make ADVANCE Shoring the finest of its kind. Fast! Easy to use! Strong! Durable and long-lasting!

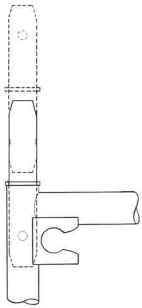
Integral locking devices assemble without tools and loose parts, resulting in reduced costs and increased job profits.

Around the world, modern construction techniques require the versatility and time-saving features of ADVANCE Shoring. Call Beaver-Advance for engineering assistance on your next shoring job. We'll help you keep costs down and profits up.



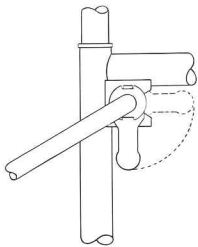


# Advance Shoring Features



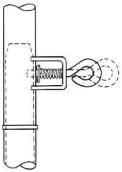
## Stack Coupling Release

The Stack Coupling Release provides for quick and easy removal or replacement of Stack Couplings. To operate, simply press release, twist Stack Coupling and pull out. No bolts or other loose parts to get lost.



## Cam Locks

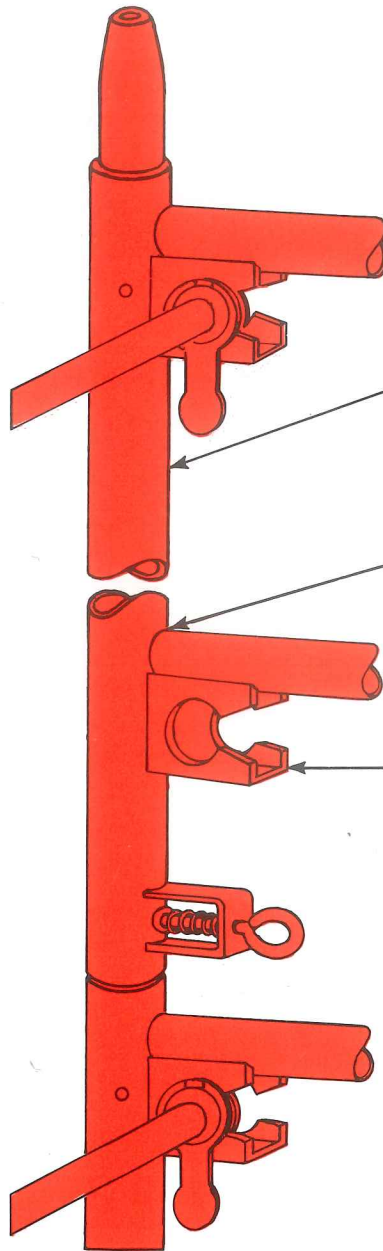
All braces are connected to panels by means of Cam Locks, welded to the ends of each brace. To assemble, hold lever in a horizontal position, slide into cam box on panel and turn lever down. Brace is securely locked to the panel without tools or loose parts.



## Stack Locks

The Stack Lock securely locks vertical tiers of Advance Shoring together. No bolts or other loose parts to get lost since the Stack Lock is welded to the bottom of each panel leg.

To operate, pull out Stack Lock and slip bottom of panel leg over stack coupling on panel below. Then release Stack Lock so that it enters the hole in the stack coupling.



## Leg Tubing

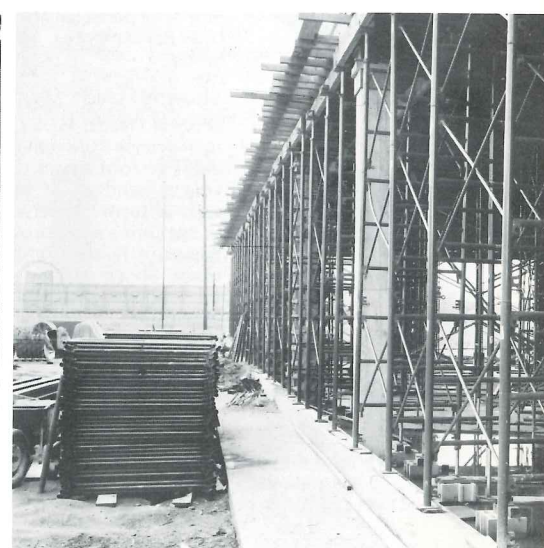
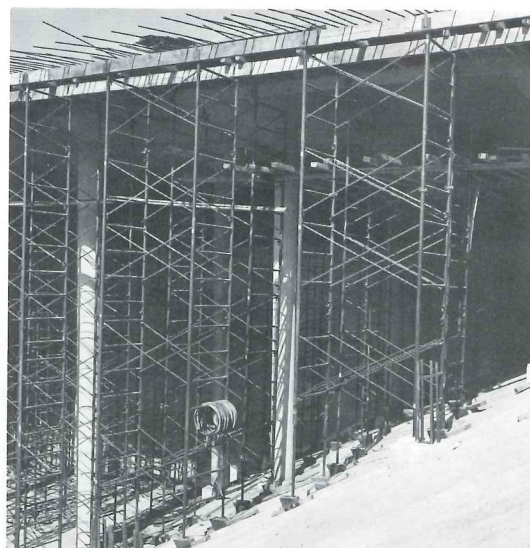
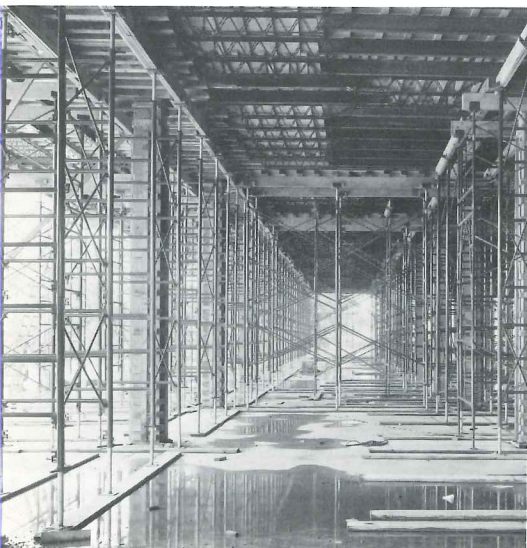
Advance Shoring Panels are fabricated from high strength, electric welded steel tubing for high load capacity and resistance to damage.

## Coped Connections

All main girt to leg connections are coped and electric welded for maximum strength and durability.

## Cam Box Location

Cam Boxes are welded into corners of girt and leg junction, providing increased panel strength and rigidity.

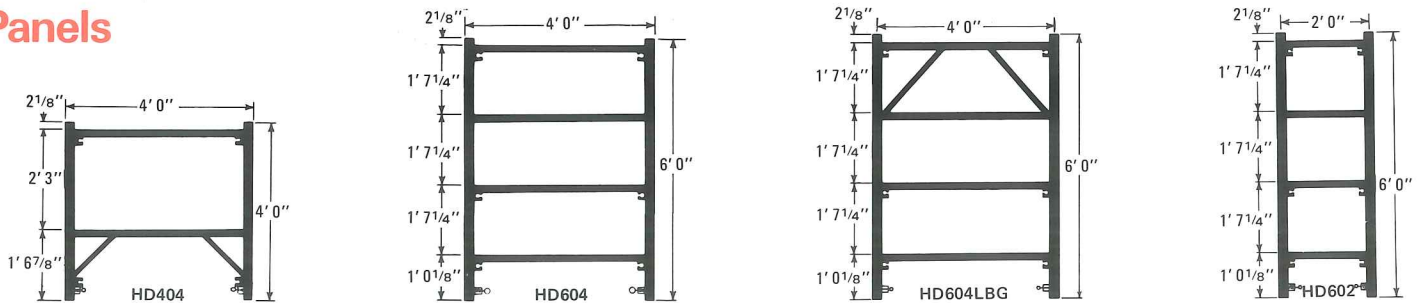


Photographs and diagrams are for product illustration only. Products must be used in conformity with safe practices and applicable codes and regulations.

# Advance 10M Heavy-Duty Shoring

[10,000 lbs. per leg allowable load\*]

## Panels



Advance 10M Heavy-Duty Shoring Panels have legs of 2 1/8" O.D. high strength tubing with an allowable load rating of 10,000 lbs. per leg.\* Advance 10M Panels have a standard width of 4' and are available in heights of 4', 5' and 6'. Load bearing girt models (LBG) are available for

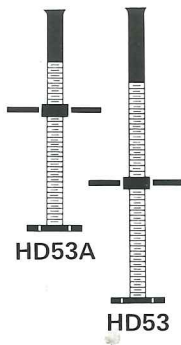
supporting formwork directly on the top girt. Panels are also available in widths of 2', 3' and 5' and in heights other than 4', 5' and 6'. All 10M Panels are assembled with standard cross braces. All Shoring towers erected from 5' and 6' high panels also require stringer braces in the base section.

## Accessories

### Adjustable Bases

Adjustable Bases are used for leveling 10M panels and to obtain additional height. They can be inverted and used in the top of a 10M panel for adjusting and stripping formwork. They are available in four models, as follows:

Part No.	Adjustment
HD53	24"
HD53P	24" (Plated)
HD53A	17"
HD53AP	17" (Plated)



### Foot Plates

Foot Plates, HD55, may be used at the bottom of a 10M panel leg to distribute load into footings. They can be inverted and used in the top of a 10M panel leg as a bearing surface for shoring heads.



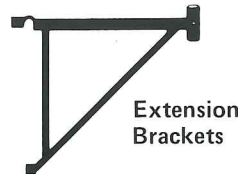
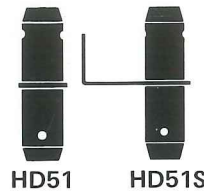
### Shoring Heads

Shoring Heads, HD57, bolt to Advance 10M adjustable bases or foot plates to provide a saddle for various sizes of form lumber. Holes in the unit's sides provide a means of nailing lumber in place. Shoring heads are also available in special sizes as required.



### Stack Couplings

Stack Couplings are used to vertically connect and align tiers of 10M panels. They lock into the tops of panel legs by means of self-contained stack coupling releases. Model HD51 contains a 3/16" thick collar to evenly distribute loads from one panel leg to another. Model HD51S has an extended collar to provide a nailing plate for tying shoring towers together with wood stringer or cross bracing.



### Extension Brackets

10M Extension Brackets are used to support work platforms or beam form kicker bracing. They mount to either the sides or ends of 10M panels and are available in the following models:

Part No.	Extension Length
HD62A	20"
HD62B	24"
HD62C	30"
HD63	Adjustable to 20", 24" and 30"

Extension Brackets are not to be used for supporting shoring loads.

### Brace Brackets

Brace Brackets are used to attach cross or lateral wood bracing between towers of 10M shoring. Bracket HD52 fits around 10M panel legs. Bracket HD54 fits around shore staffs.



### Shore Staffs

Shore Staffs, HD59, are used with 10M panels to obtain additional height, and for rapidly lowering formwork as much as 5' to clear beams when shoring is erected into grids and moved intact. They are adjustable in 6" increments by means of a pin and collar (Part No. PC1) which bears on either the leg insert (HD56) or adjustable sleeve (HD58).



### Leg Inserts

Leg Inserts, HD56, mount in the top of 10M panel legs to provide a snug fit for shore staffs and a solid base for the shore staff pin and collar.



### Adjustable Sleeves

Adjustable Sleeves, HD58, are used with shore staffs to obtain up to an additional 6" of fine adjustment for leveling and stripping forms. They insert into the top of 10M panel legs and secure in place by means of a self-contained lock/release mechanism.



## Braces

### Cross Braces

All Cross Braces are fabricated from 1" O.D. high strength tubing with self-contained cam locks at brace ends for fast panel attachment, without tools. All 10M and 15M panels, 4' or greater in height, assemble with 4X Series Cross Braces, which are available for standard spans of 2 1/2', 4', 5', 6', 7', 8' and 10'.

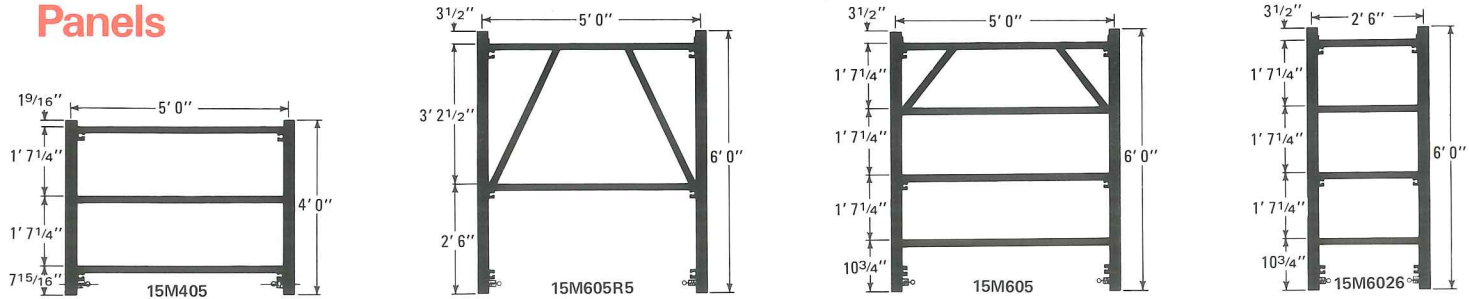




# Advance 15M Hi-Capacity Shoring

[15,000 lbs. per leg allowable load\*]

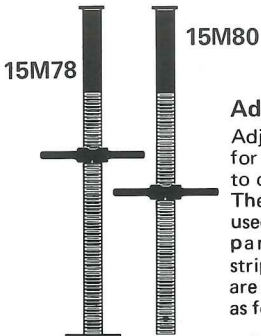
## Panels



Advance 15M Hi-Capacity Shoring Panels have legs of 3" O.D. high strength tubing with an allowable load rating of 15,000 lbs. per leg.\* Advance 15M Panels have a standard width of 5' and are available in heights of 4', 5' and 6'. A load bearing girt model (LBG) is available for

supporting formwork directly on the top girt. Panels are also available in widths of 2½' and 4' with heights of 4', 5' and 6'. All 15M Panels are assembled with standard cross braces. All shoring towers erected from 5' and 6' high panels also require stringer braces in the base section.

## Accessories



### Adjustable Bases

Adjustable Bases are used for leveling 15M panels and to obtain additional height. They can be inverted and used in the top of a 15M panel for adjusting and stripping formwork. They are available in four models, as follows:

Part No.	Description
15M77	With Base Plate (Plated)
15M78	With Base Plate (Unplated)
15M79	Without Base Plate (Plated)
15M80	Without Base Plate (Unplated)

All models have 24" of adjustment.

### Foot Plates

Foot Plates, 15M85, may be used at the bottom of a 15M panel leg to distribute the load into footings. They may also be attached to adjustable bases (15M79 and 15M80) and shore staffs (15M94), or inserted directly into the tops of panel legs, to provide a bearing surface for shoring head (15M87).



15M85



15M87



15M88

### Shoring Heads

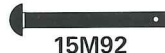
Shoring Heads are used to provide a saddle for various sizes of form lumber. Bolt-on type, 15M87, bolts to base plate type adjustable bases (15M77 and 15M78) or to foot plates (15M85). Stem type, 15M88, attaches to adjustable bases (15M79 and 15M80), shore staffs (15M94), or inserts directly into the tops of 15M panel legs. Both models have holes in their sides to provide a means of nailing lumber in place.



15M89

### Adjustable Sleeves

Adjustable Sleeves, 15M89, are used with shore staffs to obtain up to an additional 6" of fine adjustment for leveling and stripping forms. They mount over the top of the leg on any 5' and 6' high, 15M panel. They cannot be used with a 4' high, 15M panel.



15M92



15M93

### Retaining Pins and Clips

Retaining Pins 15M92, and Retaining Pin Clips, 15M93, are used to connect foot plates (15M85) and shoring heads (15M88) to adjustable bases (15M79 and 15M80) or shore staffs (15M94). They may also be used to lock the foot plates and shoring heads into the tops of 15M panel legs.



15M81

### Brace Brackets

Brace Brackets are used to attach cross or lateral wood bracing between towers of 15M shoring. Bracket 15M81 fits around 15M panel legs. Advance 10M Bracket, HD54, is used with 15M shore staffs.



15M94

### Shore Staffs

Shore Staffs, 15M94, are used with 15M panels to obtain additional height and for rapidly lowering formwork as much as 5' to clear beams when shoring is erected into grids and moved intact. They are adjustable in 6" increments by means of pin and collar (15M91).



15M91

### Pin and Collar Assemblies

Pin and Collar Assemblies, 15M91, are used to position shore staffs at their desired elevation. Shore staff load is transferred through pin to the collar, which bears on the adjustable sleeve (15M89).



15M75

### Stack Couplings

Stack Couplings, 15M75, are used to vertically connect and align tiers of 15M panels. They lock into the tops of panel legs by means of self-contained stack coupling releases.

### Stringer Braces

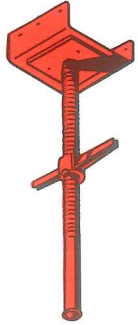
Stringer Braces are fabricated from 1" O.D. high strength tubing with self-contained cam locks at brace ends. They are used to provide stability in the base section of shoring towers constructed from 5' or 6' high panels. They are available for standard spans of 2½', 4', 5', 6', 7', 8' and 10'.

### Horizontal Braces

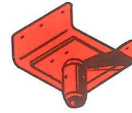
Horizontal Braces are fabricated from 1¼" O.D. high strength tubing with a self-contained locking mechanism at brace ends. They are placed in a horizontal, diagonal position across bays or sections of shoring towers to provide extra rigidity.

\*Based on tests conducted according to the Scaffolding and Shoring Institute's recommended testing procedures. Allowable panel leg loads vary according to panel size, height to which shoring is erected, and adjustable base and shore staff extension. Consult Beaver-Advance for load ratings of panels and accessories under specific conditions.

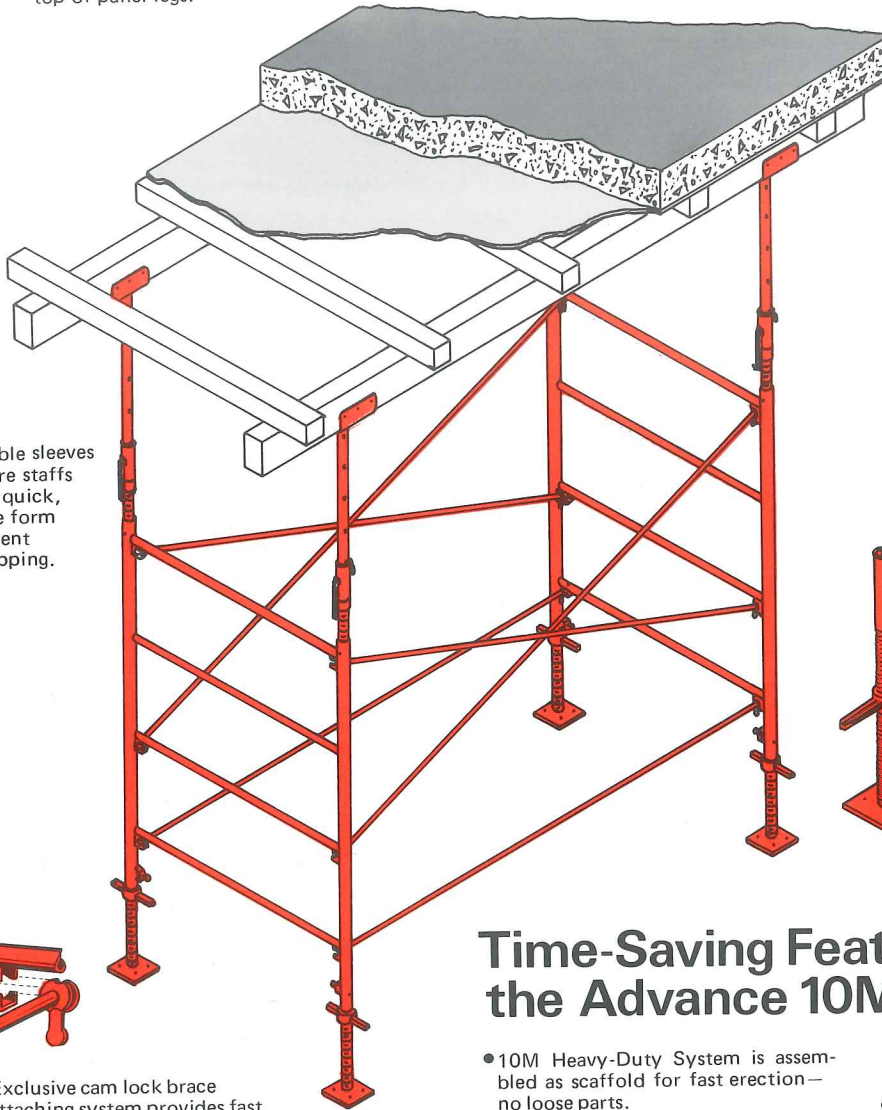
# Shoring with 10M



Shoring heads attach to adjustable bases for use in top of panel legs.



Shoring heads can be mounted directly into tops of panel legs.



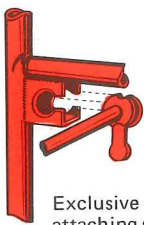
10M Heavy-Duty Panels are available in a variety of heights and widths to meet any shoring requirement.



Adjustable sleeves and shore staffs provide quick, accurate form adjustment and stripping.



Adjustable bases provide up to 24" of accurate height adjustment.



Exclusive cam lock brace attaching system provides fast, easy and positive assembly.

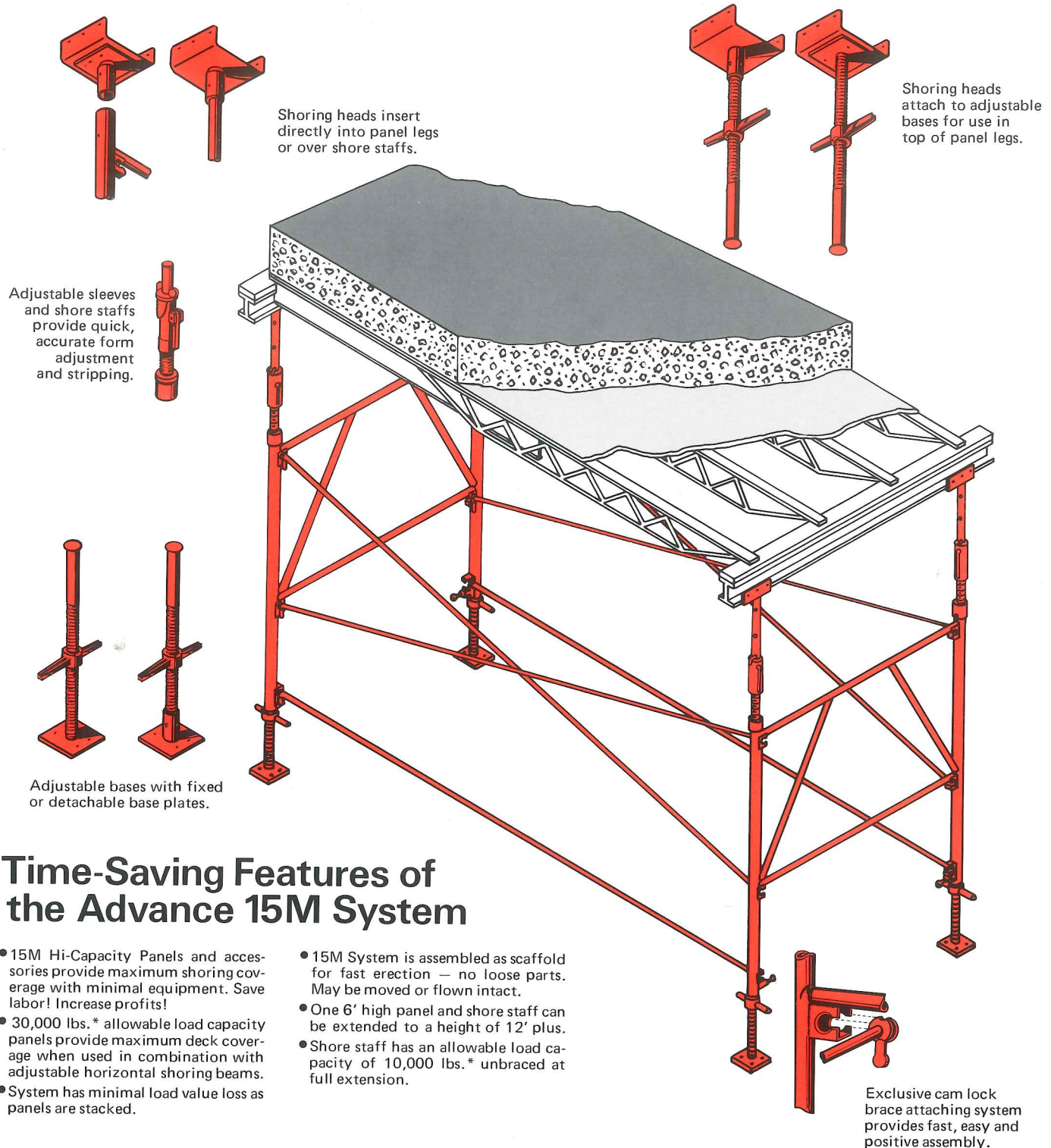
## Time-Saving Features of the Advance 10M System

- 10M Heavy-Duty System is assembled as scaffold for fast erection—no loose parts.
- System can be flown, rolled, or moved on skids. Keeps formwork intact for multiple reuse.
- 20,000 lbs.\* allowable load capacity panels provide maximum utilization of common lumber sizes.
- 10M Heavy-Duty Panels provide high loading capacity with minimal weight.
- A complete complement of accessories for maximum flexibility in supporting a variety of formwork. Simplifies the most complicated shoring projects!
- Shore staffs and adjustable bases combine for a complete range of height adjustment.

Photographs and diagrams are for product illustration only. Products must be used in conformity with safe practices and applicable codes and regulations.



# Shoring with 15M



Shoring heads insert directly into panel legs or over shore staffs.

Shoring heads attach to adjustable bases for use in top of panel legs.

Adjustable sleeves and shore staffs provide quick, accurate form adjustment and stripping.

Adjustable bases with fixed or detachable base plates.

## Time-Saving Features of the Advance 15M System

- 15M Hi-Capacity Panels and accessories provide maximum shoring coverage with minimal equipment. Save labor! Increase profits!
- 30,000 lbs.\* allowable load capacity panels provide maximum deck coverage when used in combination with adjustable horizontal shoring beams.
- System has minimal load value loss as panels are stacked.
- 15M System is assembled as scaffold for fast erection — no loose parts. May be moved or flown intact.
- One 6' high panel and shore staff can be extended to a height of 12' plus.
- Shore staff has an allowable load capacity of 10,000 lbs.\* unbraced at full extension.

Exclusive cam lock brace attaching system provides fast, easy and positive assembly.

\*Based on tests conducted according to the Scaffolding and Shoring Institute's recommended testing procedures. Allowable panel leg loads vary according to panel size, height to which shoring is erected, and adjustable base and shore staff extension. Consult Beaver-Advance for load ratings of panels and accessories under specific conditions.

# Steel Frame Shoring Safety Rules

As recommended by Scaffolding and Shoring Institute

(See separate Scaffolding Safety Rules and Recommended Steel Frame Shoring Erection Procedure).

Following are some common sense rules designed to promote safety in the use of steel frame shoring equipment. These rules are illustrative and suggestive only, and are intended to deal only with some of the many practices and conditions encountered in the use of steel frame shoring. The rules do not purport to be all-inclusive or to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. They are not intended to conflict with, or supersede, any state, local, or federal statute or regulation; reference to such specific provisions should be made by the user. (See Rule 11.)

- I. **POST THESE SHORING SAFETY RULES** in a conspicuous place and be sure that all persons who erect, dismantle or use, shoring frames are aware of them.
- II. **FOLLOW ALL STATE, LOCAL AND FEDERAL CODES, ORDINANCES and REGULATIONS** pertaining to shoring.
- III. **INSPECT ALL EQUIPMENT BEFORE USING.** Never use any equipment that is damaged.
- IV. **A SHORING LAYOUT** — Shall be available on the jobsite at all times.
- V. **INSPECT ERECTED SHORING AND FORMING:** a) Immediately prior to pour; b) During pour; c) After pour until concrete is set.
- VI. **CONSULT YOUR SHORING EQUIPMENT SUPPLIER WHEN IN DOUBT.** Shoring is his business, **NEVER TAKE CHANCES.**
- A. **USE MANUFACTURER'S RECOMMENDED SAFE WORKING LOADS CONSISTENT WITH** the type of **SHORING FRAME** and the height from supporting sill to formwork.
- B. **DO NOT EXCEED THE SHORE FRAME SPACINGS OR TOWER HEIGHTS** as shown on the shoring layout.
- C. **SHORING LOAD SHOULD BE CARRIED ON LEGS.** Consult your shoring supplier for **SHORING FRAMES** that are designed for taking loads on top horizontal.
- D. **IF MOTORIZED CONCRETE EQUIPMENT** is to be used, be sure that the shoring layout has been designed for use with this equipment and such fact is noted on the layout.
- E. **PROVIDE AND MAINTAIN A SOLID FOOTING** to distribute maximum loads properly.
- F. **USE ADJUSTMENT SCREWS** to adjust to uneven grade conditions.
- G. **USE ADJUSTMENT SCREWS** to level-off, to accurately position the falsework and for easy stripping.
- H. **KEEP SCREW EXTENSIONS** to a minimum for maximum load carrying capacity (follow manufacturer's recommendation of screw extension).
- I. **MAKE CERTAIN THAT ALL ADJUSTMENT SCREWS** are firmly in contact with sills, formwork and frame legs.
- J. **PLUMB AND LEVEL ALL SHORING FRAMES** as the erection proceeds. **DO NOT** force braces on frames to fit — level the shoring towers until proper fit can be made easily. **CHECK PLUMB AND LEVEL OF SHORING TOWERS** just prior to pour.
- K. **FASTEN ALL BRACES SECURELY.**
- L. **TIE HIGH TOWERS OF SHORING FRAMES TOGETHER** with sufficient braces to make a rigid, solid unit (see manufacturer's recommendations).
- M. **EXERCISE CAUTION** in erecting or dismantling free standing shoring towers to prevent tipping.
- N. **DO NOT CLIMB CROSS BRACES.**
- O. **AVOID ECCENTRIC LOADS ON U-HEADS,** top plates and similar members by centering stringers on those members.
- P. **USE SPECIAL PRECAUTIONS** when shoring from or to sloped surfaces.
- Q. **USE LUMBER STRESSES** as shown on layout and consistent with age, type and condition of the available lumber to be used. Use only lumber that is in good condition.
- R. **RESHORING PROCEDURE SHOULD BE APPROVED BY A QUALIFIED ENGINEER.**
- S. **DO NOT REMOVE BRACES OR BACK-OFF ON ADJUSTMENT SCREWS** until proper authority is given.

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