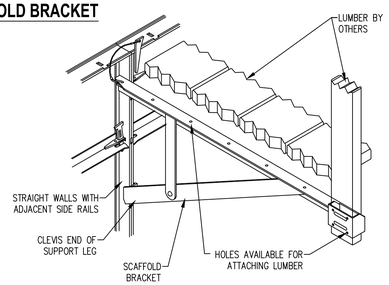
SYMONS BY DAYTON SUPERIOR — Steel-Ply Safety Applications

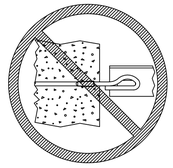
ALL SYMONS COMPONENTS AND ACCESSORIES ARE DESIGNED WITH SAFETY AND PERFORMANCE IN MIND. THE APPLICATION NOTES ON THIS SHEET WILL HELP YOU ACHIEVE A SAFE AND PRODUCTIVE FORMING OPERATION. IT IS RECOMMENDED THAT ALL CONSTRUCTION PERSONNEL THOROUGHLY FAMILIARIZE THEMSELVES AND COMPLY WITH THE APPLICABLE INDUSTRY STANDARDS AND SAFE PRACTICES ESTABLISHED BY "THE AMERICAN CONCRETE INSTITUTE, AMERICAN NATIONAL STANDARDS INSTITUTE, THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, AND THE SCAFFOLDING AND SHORING INSTITUTE."

IMPORTANT:
ALL FORMING AND SHORING COMPONENTS MUST BE INSPECTED REGULARLY FOR DAMAGE OR EXCESSIVE WEAR. EQUIPMENT FOUND TO BE DAMAGED OR EXCESSIVELY WORN MUST BE REPLACED IMMEDIATELY.

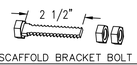
STEEL-PLY SCAFFOLD BRACKET

- WARNING – IMPROPER ATTACHMENT OF WALKWAY BRACKETS AND WALKWAY COMPONENTS MAY RESULT IN SEVERE INJURY.
- DO NOT USE WALKWAY BRACKET AS A LIFTING BRACKET OR TIE–OFF.
- ALLOWABLE LOAD ON WALKWAY BRACKET IS 500 LBS. @ 4:1 SAFETY FACTOR. WHEN THE WALKWAY BRACKETS ARE SPACED AT 6'–0" C/C, MAXIMUM ALLOWABLE APPLIED LOAD ON BRACKETS = 25 PSF. SECURE PLANKING TO WALKWAY BRACKETS.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WORKERS HAVE ADEQUATE FALL PROTECTION DURING FORMWORK ERECTION.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING AND SUPPLYING ANY ADDITIONAL COMPONENTS (PLANKING, GUARDRAILS, ETC.) REQUIRED TO CREATE A WORK PLATFORM WHICH MEETS OR EXCEEDS ALL APPLICABLE INDUSTRY STANDARDS.

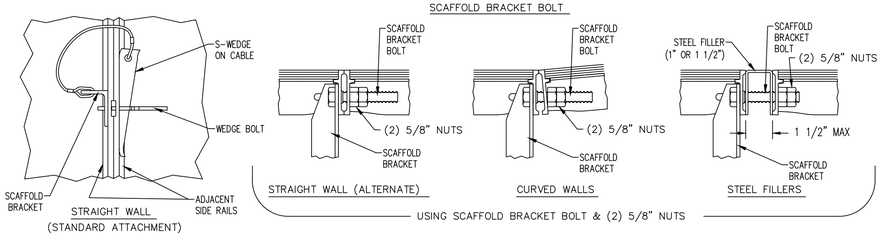




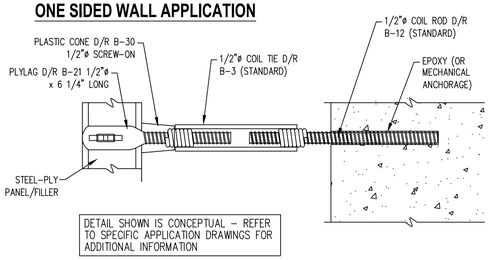
WARNING
NEVER SECURE THE SCAFFOLD BRACKET TO TIES AFTER THE FORMS HAVE BEEN STRIPPED AND REMOVED, OR IN ANY OTHER MANNER OTHER THAN AS ILLUSTRATED. IMPROPER ATTACHMENT OF SCAFFOLD BRACKETS MAY RESULT IN SEVERE INJURY OR DEATH.



SCAFFOLD BRACKET BOLT



ONE SIDED WALL APPLICATION

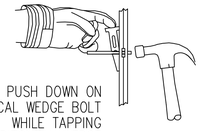


DETAIL SHOWN IS CONCEPTUAL – REFER TO SPECIFIC APPLICATION DRAWINGS FOR ADDITIONAL INFORMATION

WEDGE BOLTS

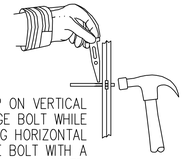
A SUFFICIENTLY TIGHT WEDGE BOLT CONNECTION CAN BE ACHIEVED BY PUSHING DOWN ON THE HEAD OF THE VERTICAL WEDGE BOLT WITH ONE HAND WHILE STRIKING THE HEAD OF THE LATERAL WEDGE BOLT WITH A HAMMER. THE VERTICAL WEGDE BOLT WILL RESPOND DOWNWARD TO A TIGHT, SECURE POSITION.

TO INSTALL WEDGE BOLTS



PUSH DOWN ON VERTICAL WEDGE BOLT WHILE TAPPING HORIZONTAL WEDGE BOLT WITH A HAMMER.

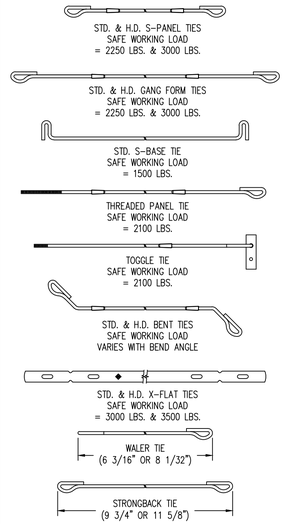
TO REMOVE WEDGE BOLTS



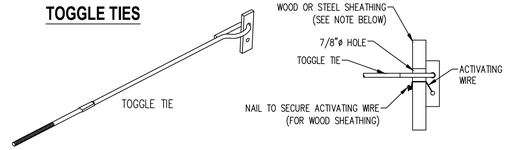
PULL UP ON VERTICAL WEDGE BOLT WHILE TAPPING HORIZONTAL WEDGE BOLT WITH A HAMMER.

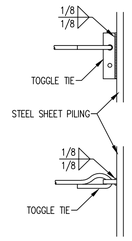
TIES

ALL SAFE WORKING LOADS SHOWN @ 2:1 SAFETY FACTOR



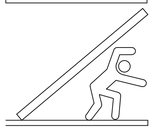
TOGGLE TIES





- TOGGLE TIES ARE TO BE WELDED ON BOTH SIDES OF TOGGLE WHEN ATTACHED TO STEEL.
- APPROPRIATE WELDING PROCEDURES MUST BE EMPLOYED FOR SOUND WELD. TOGGLE BASE MATERIAL IS C–1020 HOT ROLLED.
- THE CAPACITY OF TOGGLE TIES ARE DEPENDENT ON THE ADEQUACY OF THE ANCHORAGE BY THE CONTRACTOR.
- TOGGLE TIES PROVIDE FIELD WELD ATTACHMENT TO STEEL PILINGS AS INDICATED IN THE SKETCHES TO THE TOP, OR FOR TOGGLE ANCHORAGETO TIMBER OF STEEL SHEETING AS INDICATED IN THE SKETCH ABOVE. THE LATTER APPLICATION REQUIRES A 7/8"ø HOLE THROUGH THE SHEATHING MATERIAL AND AN ACTIVATING WIRE TO ASSURE PROPER TOGGLE POSITIONING.
- CARE MUST BE TAKEN TO ASSURE THAT EACH TIE IS TAKING ITS SHARE OF THE LOAD (i.e. ALL NUTS MUST BE EQUALLY TIGHTENED)
- THE RECOMMENDED VERTICAL SPACING IS 12" MAXIMUM ON CENTER FOR ALL WALL HEIGHTS.

WARNING



UNSECURED FORMWORK CAN FALL OVER CAUSING SEVERE INJURY OR DEATH !!

IMPORTANT: BRACING / ALIGNERS

BRACING

1.) BRACING MUST BE IN PLACE WHILE SETTING FORMWORK AND REMAIN IN PLACE UNTIL FORMS ARE STRIPPED.
2.) CONTRACTOR IS TO INSURE THAT FORMWORK IS PROPERLY BRACED AND STABILIZED AGAINST WIND AND OTHER EXTERNAL FORCES.

STRIPPING AND REMOVAL OF GANG FORMS

1.) ATTACH THE CRANE RIGGING TO THE LIFTING BRACKETS AND SLOWLY TAKE UP THE SLACK IN THE RIGGING.
2.) SAFELY REMOVE ALL TIES, BRACES, AND ALIGNERS.
3.) BREAK THE BOND BETWEEN THE CONCRETE AND THE FORMS. DO NOT USE THE CRANE TO BREAK THE BOND.
4.) MOVE THE GANG FORM TO THE NEXT LOCATION.
5.) FULLY BRACE AND SECURE THE FORM BEFORE REMOVING CRANE RIGGING.

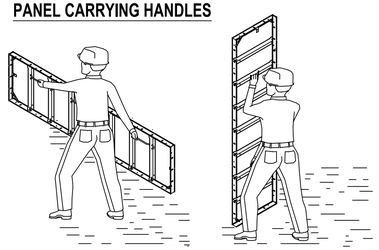
ALIGNERS

SYMONS TURNBUCKLE ALIGNERS AND ATTACHMENT PLATES ARE CONSIDERED ONLY AS ALIGNMENT DEVICES AND ARE NOT TO BE USED AS FORM BRACING.



SYMONS RECOMMENDS GLOVES, HARDHATS, SAFETY SHOES, AND SAFETY GLASSES BE WORN DURING ALL FORMING AND POURING OPERATIONS.

PANEL CARRYING HANDLES

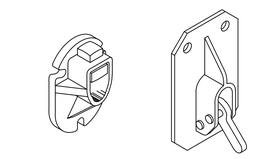


QUICK HOOK™ HANDLES — U–SHAPED HANDLES

WARNING
NEVER SECURE PANEL HANDLES AS A CONNECTING POINT FOR BRACING, ALIGNING, SCAFFOLDING, OR CRANE HOOK–UP ON GANGED PANELS. SUCH CONNECTIONS MAY CAUSE THE HANDLES TO BREAK, RESULTING IN SEVERE INJURY OR DEATH.

PENCIL ROD

.225"ø x 10'–0", 15'–0", & 20'–0" LENGTHS + 7 3/8"–0" COILS



D–12–S ROD CLAMP SAFE WORKING LOAD = 1125 LBS. (@ 2:1 SAFETY FACTOR)

D–12–F ROD CLAMP SAFE WORKING LOAD = 1250 LBS. (@ 2:1 SAFETY FACTOR)

THREADED PANEL TIES

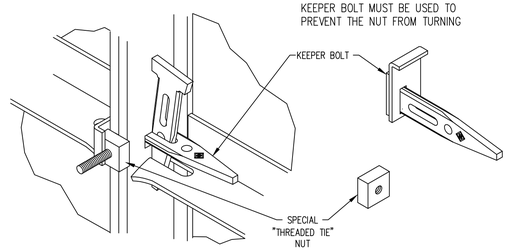
- CARE MUST BE TAKEN TO ASSURE THAT EACH TIE IS TAKING ITS SHARE OF THE LOAD (i.e. ALL NUTS MUST BE EQUALLY TIGHTENED)
- THE RECOMMENDED VERTICAL SPACING IS 12" MAXIMUM ON CENTER FOR ALL WALL HEIGHTS.
- THREADED TIES ALLOW APPROXIMATELY 2 INCHES OF ADJUSTMENT AND HAVE A SAFE WORKING LOAD = 2100 LBS (AT 2:1 SAFETY FACTOR)



THREADED PANEL TIE

NOTE – THREADED TIES HAVE A SPECIAL THREAD REQUIRING THE USE OF A SPECIAL NUT

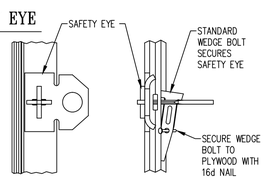
KEEPER BOLT MUST BE USED TO PREVENT THE NUT FROM TURNING

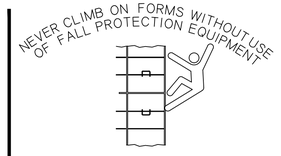


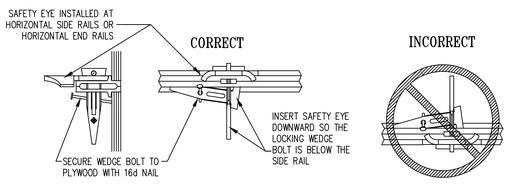
ATTACHMENT POINT FOR FALL PROTECTION EQUIPMENT

WHEN PROPERLY INSTALLED, BOTH THE SAFETY EYE AND QUICK HOOK HANDLE PROVIDE AN ATTACHMENT POINT FOR FALL PROTECTION EQUIPMENT THAT MEETS OR EXCEEDS THE LOAD REQUIREMENT UNDER FEDERAL OSHA STANDARD 1926.502(d)(15).
(NOTE – FORMS MUST BE ADEQUATELY BRACED BY THE CONTRACTOR TO RESIST THE RESULTANT LOADS – SEE GENERAL FORMING NOTE 2)

SAFETY EYE







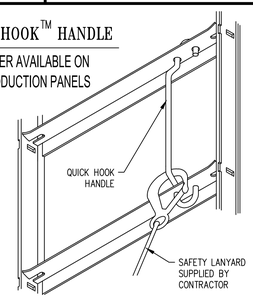
- A SAFETY EYE IS TO BE USED BY ONLY ONE PERSON AT ANY GIVEN TIME.
- ATTACH SAFETY BELT TO SAFETY EYE WHILE WORKING OR CLIMBING THE FORM.
- SAFETY EYES SHOULD BE SPACED AS REQUIRED TO PROVIDE THE NECESSARY FALL PROTECTION ATTACHMENT POINTS.
- FORMWORK MUST BE ADEQUATELY BRACED BY THE CONTRACTOR TO RESIST THE RESULTANT LOADS.

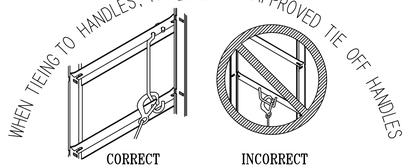
WARNING
NEVER ATTACH THE SAFETY EYE AS A LIFT BRACKET, AS IT MAY BREAK AND CAUSE SEVERE INJURY OR DEATH.

NEVER ATTACH THE SAFETY EYE TO A SINGLE HORIZONTAL STEEL–PLY SIDE OR END RAIL. SUCH ATTACHMENT WILL RESULT IN A LOOSE CONNECTION, WHCIH MAY RESULT IN SEVERE INJURY OR DEATH.

QUICK HOOK™ HANDLE

NO LONGER AVAILABLE ON NEW PRODUCTION PANELS



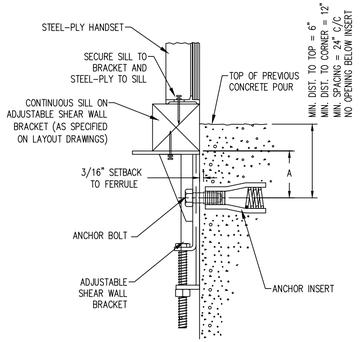


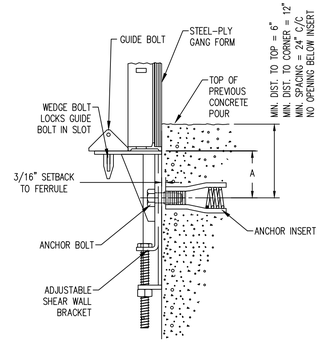
- A QUICK–HOOK HANDLE IS TO BE USED BY ONLY ONE PERSON AT ANY GIVEN TIME.
- ATTACH SAFETY BELT TO QUICK–HOOK HANDLE WHILE WORKING OR CLIMBING THE FORM.
- QUICK–HOOK HANDLES SHOULD BE SPACED AS REQUIRED TO PROVIDE THE NECESSARY FALL PROTECTION ATTACHMENT POINTS.
- FORMWORK MUST BE ADEQUATELY BRACED BY THE CONTRACTOR TO RESIST THE RESULTANT LOADS.

WARNING
NEVER ATTACH THE QUICK–HOOK HANDLE AS A LIFT BRACKET, AS IT MAY BREAK AND CAUSE SEVERE INJURY OR DEATH.

ADJUSTABLE SHEARWALL BRACKET

- ANCHOR INSERT – DAYTON/RICHMOND EXPANDED COIL INSERT GALVANIZED F–57 3/4"–10UNC FERRULE, 4 5/8" LG.
- 3/16" SETBACK
- SETTING PLUG – DAYTON/RICHMOND THREADED PLASTIC PLUG F–74 WITH 3/4"–10UNC THREADS
- ANCHOR BOLT – 3/4"–10UNC x 2" LONG ZINC PLATED GRADE 5 WITH FULL LENGTH THREADS
- ANCHOR BOLT MUST BE TIGHTENED TO PREVENT ADJUSTABLE SHEAR WALL BRACKET FROM LOOSENING OR ROTATING.
- SAFE WORKING LOAD = 3000 LBS. AT 3:1 SAFETY FACTOR WHEN INSTALLED AS REQUIRED IN 3500 PSI CONCRETE.
- DO NOT REMOVE BRACKETS UNTIL FORMS ARE STRIPPED AND WEIGHT IS REMOVED FROM BRACKETS.
- THE ADJUSTABLE SHEARWALL BRACKET HAS AN ADJUSTMENT RANGE DIMENSION "A" FROM 3 1/2" TO 5 7/8".
- FORMS MUST BE BRACED TO SUPPORT ALL OVERTURNING/TIPPING LOADS.
- USE GUIDE BOLT TO GUIDE FORM INTO POSITION. IT LOCKS THROUGH PLATE SLOT WITH WEDGE BOLT.
- SEE FORM LAYOUT DRAWINGS BY SYMONS AND DAYTON/RICHMOND GUIDELINES FOR ANCHOR INSERTS.





SEE "STEEL–PLY GANG FORM SAFETY APPLICATIONS" FOR ADDITIONAL STEEL–PLY SAFETY INFORMATION

IMPORTANT: SEE SYMONS APPLICATION DRAWINGS, APPLICATION GUIDES, AND SAFETY SHEETS FOR ADDITIONAL IMPORTANT INFORMATION, INCLUDING GENERAL NOTES AND LOCAL BRANCH CONTACT INFORMATION.

SYMONS BY DAYTON SUPERIOR
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Elk Grove Village, IL 60007
1–800–800–7652
www.DaytonSuperior.com

STEEL-PLY SAFETY APPLICATIONS

FOR

JOB

LOCATION

DATE | DRAWING NO. | SHEET NO.

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