

Water Absorption (ASTM D-570):  
7 day Total Water Absorption (2 hour boil) 0.7% SIKAGROUT 32'

Deflection Temperature (ASTM D-648):  
14 day Deflection Temperature (fiber stress loading 284 psi) 121°F

Bond Strength (ASTM C-882):  
14 day (moist cure) Plastic Concrete to Hardened Concrete 1,520 psi  
Plastic Concrete to Steel 1,900 psi

Material cured and tested at the temperature indicated.

How To Use

**Surface Preparation:** Surface must be clean and sound. If any film of dirt or oil is present, remove it. Remove dust, lint, grease, curing compounds, impregnations, wax, or other particles. Disintegrated materials.

**Preparation Work:** Concrete - Sandblast or use other approved mechanical methods. Steel - Sandblast to white metal finish.

**Mixing:** Pre-mix each component. Proportion equal parts by volume of Component A and Component B into clean pan. Mix thoroughly for 3 minutes with Sikagun on low speed (400-600 rpm) until bond is a uniform color. Mix only that quantity that can be applied within its pot life.

**Application:** To bond fresh concrete to hardened concrete - Apply by brush, roller, broom, or spray. Place fresh concrete where Sikagun 32 is to be applied. If existing becomes glossy and loose, remove any surface contaminants then recoat with additional Sikagun 32. Use Mod. and proceed.

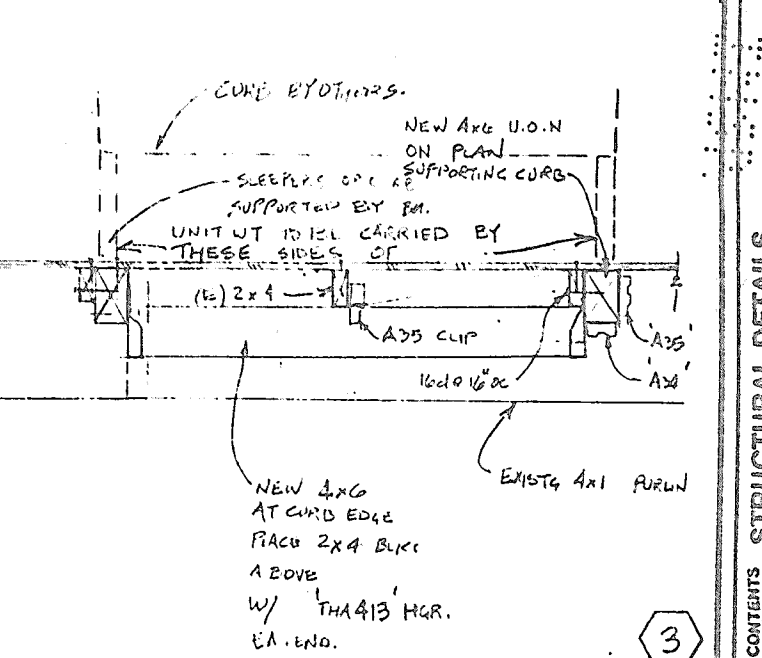
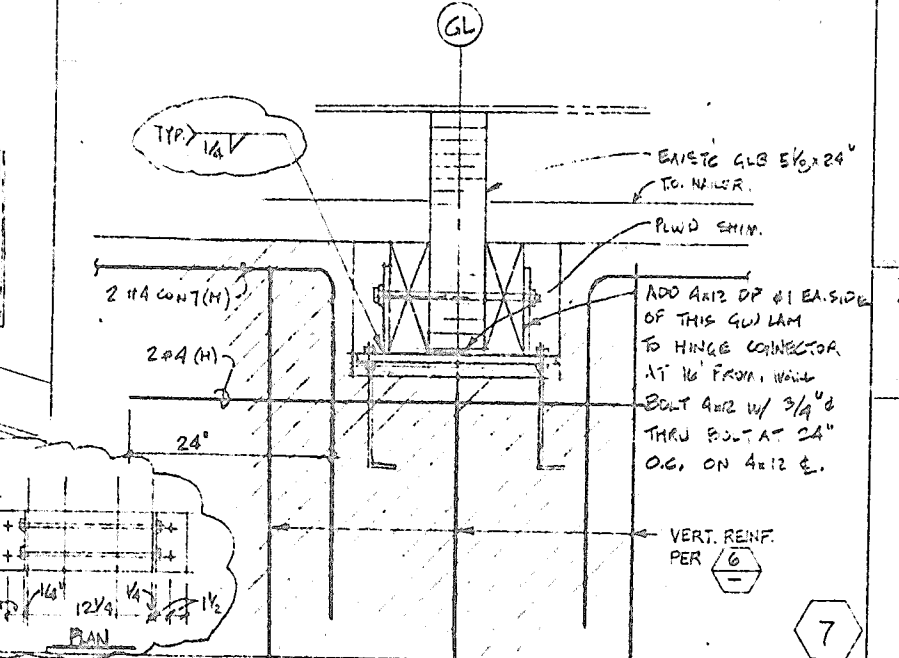
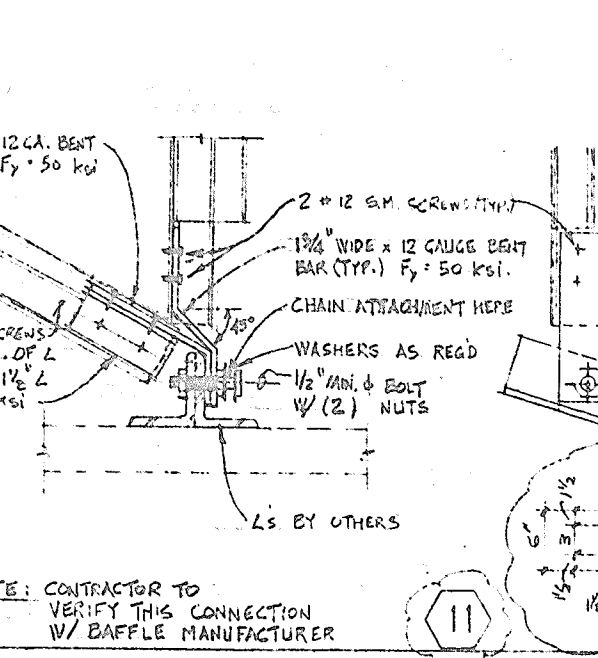
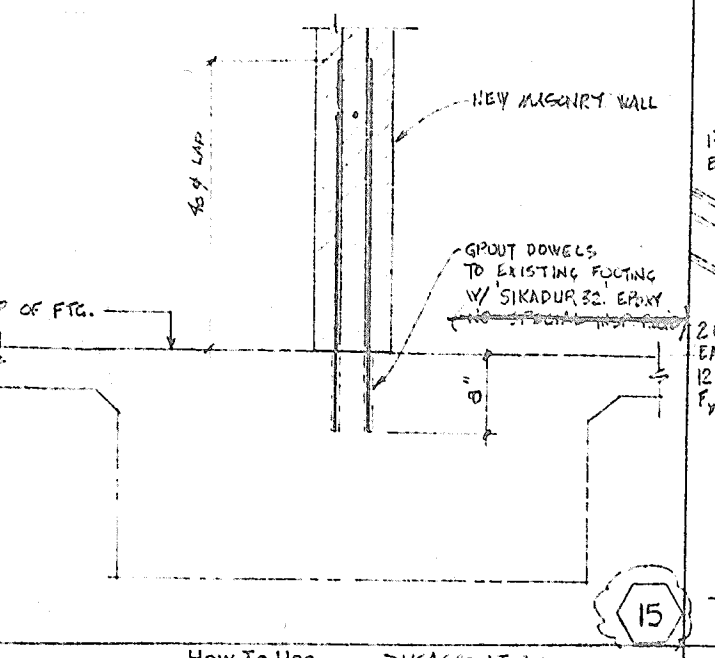
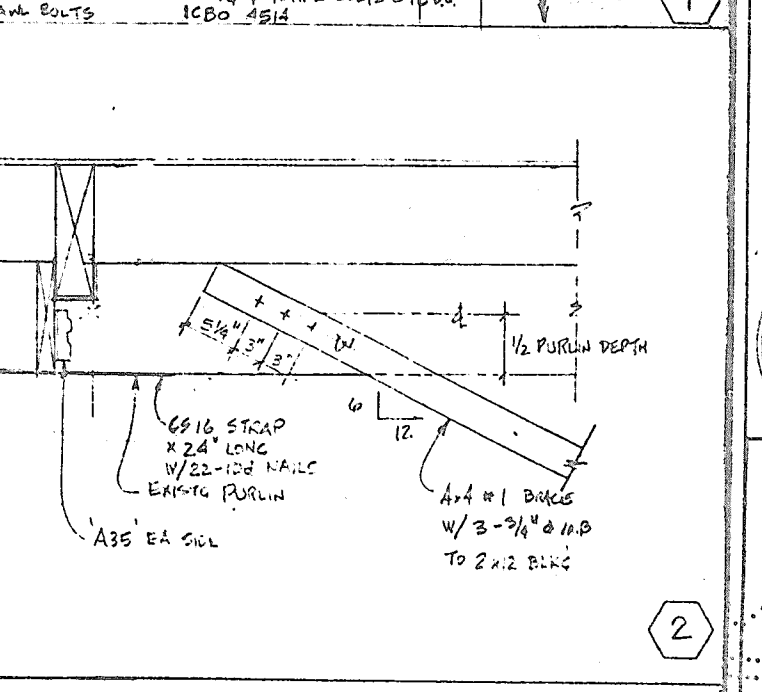
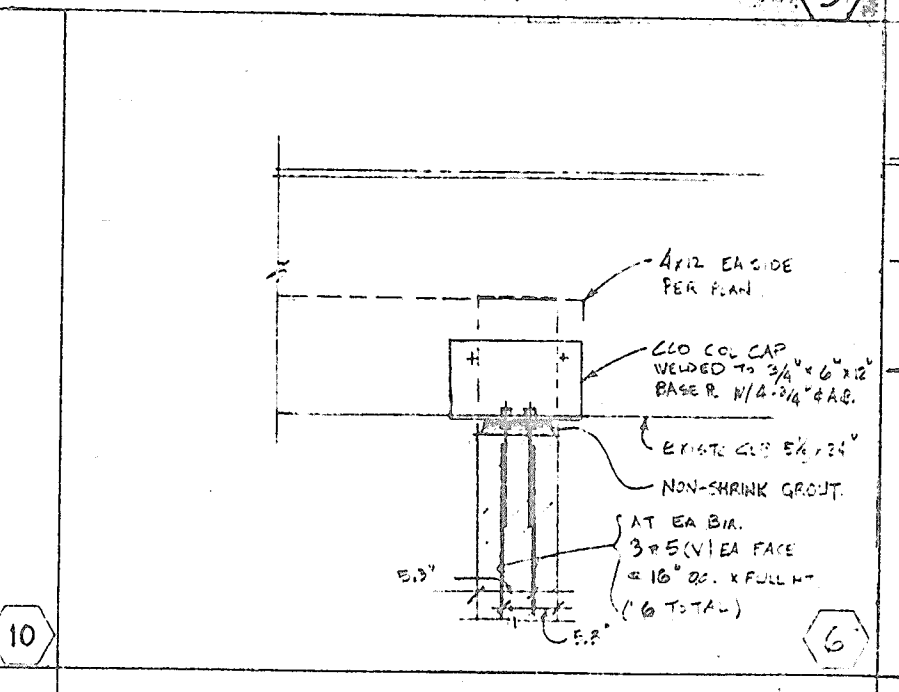
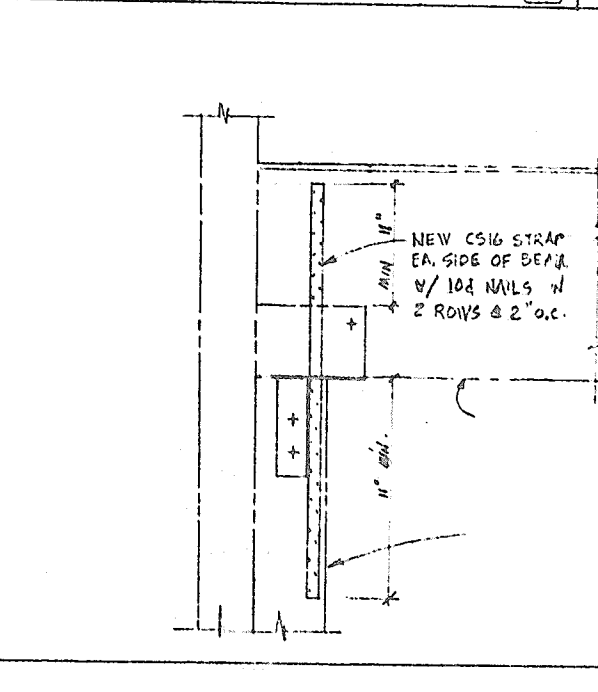
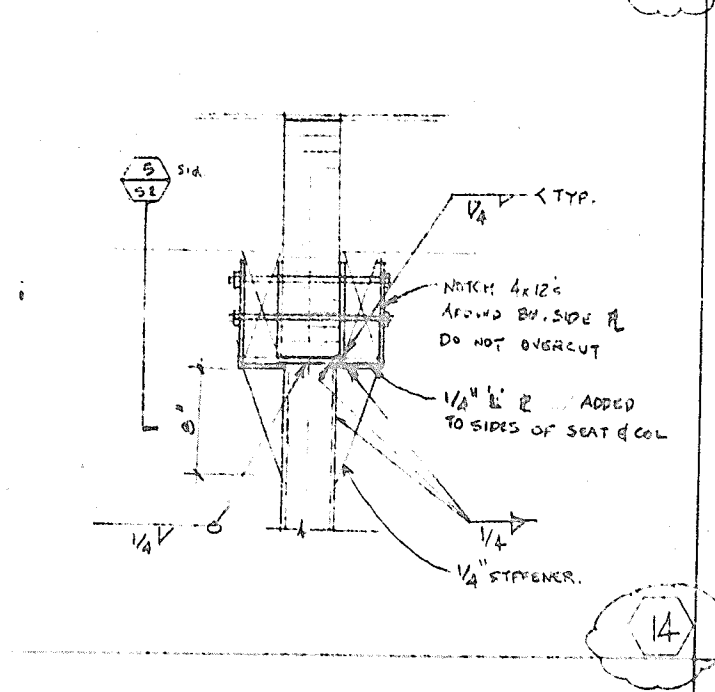
When spraying, use the following or similar equipment: Binks Model 616 Air-Atomized Spray Gun (#68 fluid nozzle, #68 PB air nozzle, #63 fluid needle, #63 - 5651 2 gal pressure fluid tank) Consult Technical Service.

To anchor bolts, dowels, and pins - Use neat. For efficient transfer of stress, the hole should be no greater in diameter than 1/4 in. larger than the bar, pin, or rod to be embedded. Depth of embedment is typically 10 to 15 bar diameters.

To grout base plates - Add up to 1 part of cover sand aggregate to 1 part of mixed Sikagun 32. Mix Mod. by volume. Place grout under base plate. Avoid contact with the underside of the plate. A 1/4 to 3/8 in. space should remain between the top of the grout and the bottom of the plate.

Maximum thickness of grout per lift is 1 in. If multiple lifts are needed, allow preceding lift to cool to touch before applying additional layer. The remaining 1/4 to 3/8 in. space should be filled with neat Sikagun 32. Mix Mod. Pour a sufficient quantity of neat epoxy to allow the gun to rest slightly higher than the underside of the base plate.

To grout lead anchors - Pour neat material into voids between crack. Continue placement until completely filled. Seal underside of slab prior to filling. Grout should reflect through.



How To Use SIKAGROUT 412

**Surface Preparation:** Remove all dirt, oil, grease, and other contaminants. Surfaces must be clean and sound. Anchor bolts to be grouted must be grouted to full depth. Grout should be applied to and reworked to provide maximum contact. Prior to grouting, surfaces should be brought to a saturated surface-dry condition.

**Forming:** For pourable grout, concrete forms to retain grout should be used. Forms should be lined or coated with bond breaker for easy removal. Forms should be sufficiently high to accommodate height of grout. Where grout height is not uniform, use SIKAGROUT 412 in dry pack consistency.

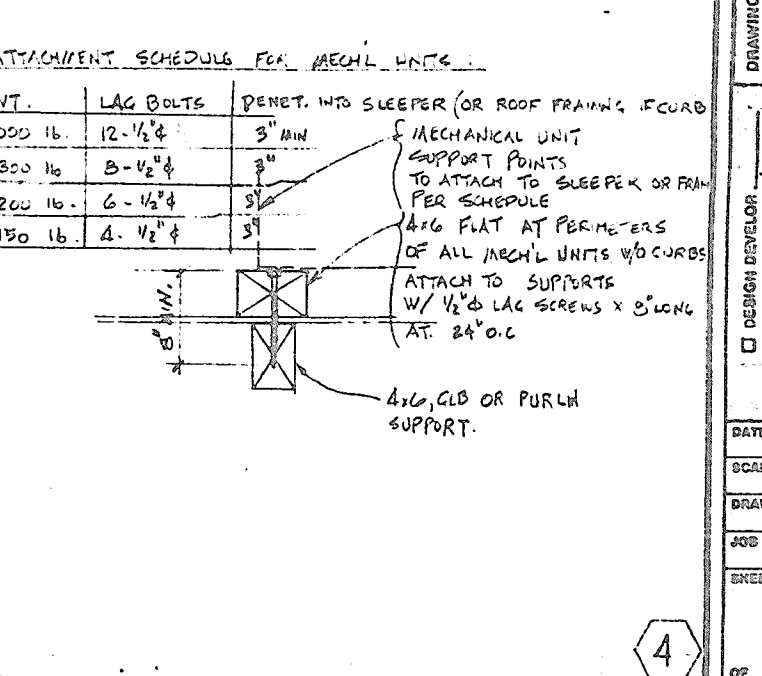
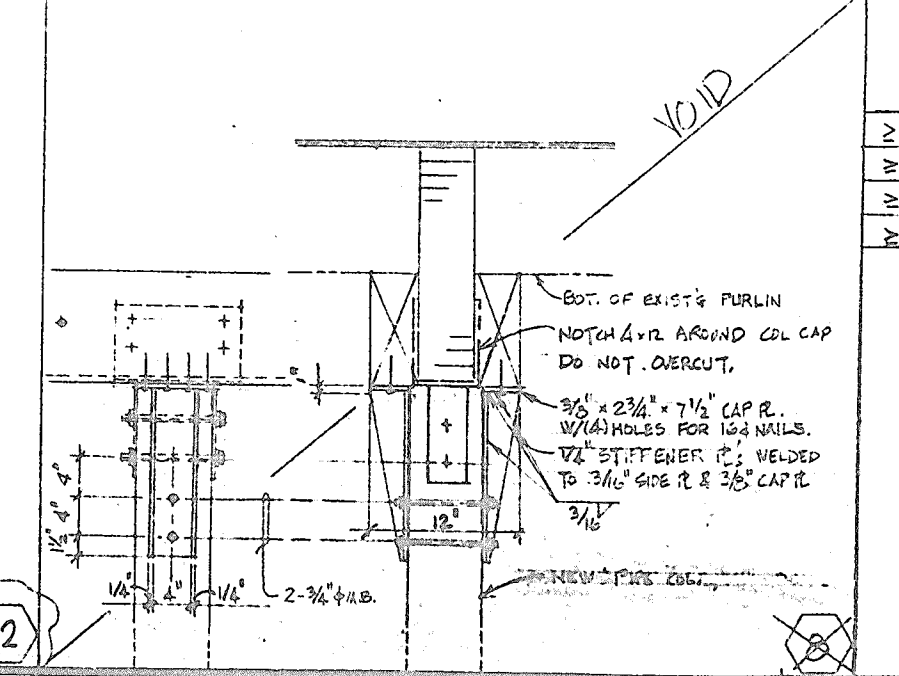
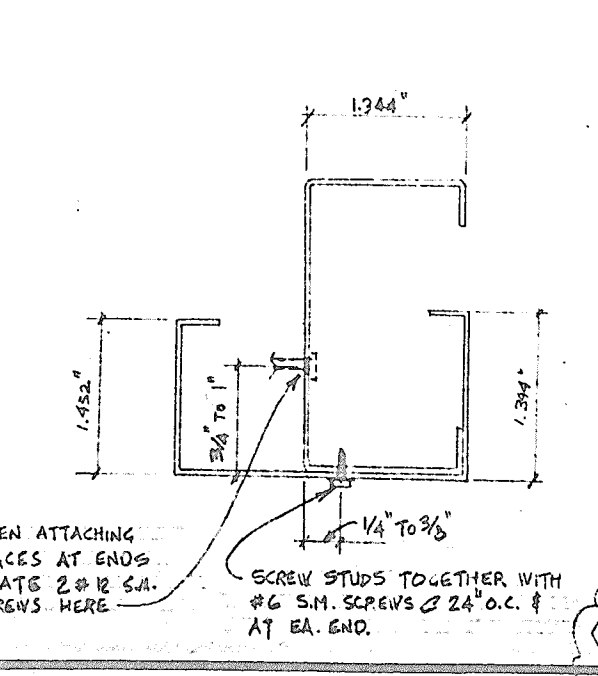
**Mixing:** Mix manually or mechanically. Mix manually in clean bucket or mortar pan. Mix manually mix with dry-sifted and 100% SIKAGROUT 412 and Sikagun 412. Mix manually in a clean bucket or mortar pan.

**Mixing Procedure:** Have sure all forms are clean and free of oil. Apply a thin coat of oil to the inside of the forms. Have quantity of clean water on hand to adjust flow. Adding of powder to the liquid should be done as close as possible to 70°F. If higher, use cold water. If lower, use warm water.

**Application:** Within 15 minutes after mixing, place grout into forms in normal manner to avoid air entrapment. Vibrating pump or ram grout as necessary to achieve flow or compaction. SIKAGROUT 412 must be confined within the forms and not allowed to flow beyond maximum exposed surface. After grout has achieved final set, remove form. Do not expose grout shoulders to desiccation. SIKAGROUT 412 can be used for grouting under high flow. For pump recommendations, contact Technical Service. Use only for a maximum of 3 days of apply a curing compound which complies with ASTM C-309 to exposed surfaces.

**Limitations:**

- Minimum ambient and substrate temperature 45°F and rising at time of application
- Minimum application thickness 1/2 in.
- Do not use as a patching mortar or in unconfined areas
- Material must be placed within 15 minutes of mixing
- Variations in cement could cause shade differences in color of the mortar



ATTACHMENT SCHEDULE FOR MECH. UNITS

WT.	LAG BOLTS	PENET. INTO SLEEPER OR ROOF FRAMING (CURB)
≥ 4000 lb	12-1/4"	3" MIN
≥ 2800 lb	8-1/2"	3"
≥ 1200 lb	6-1/2"	3"
≥ 150 lb	4-1/2"	3"

MECHANICAL UNIT SUPPORT POINTS TO ATTACH TO SLEEPER OR FRAMING PER SCHEDULE ARE FLAT AT PERIMETERS OF ALL MECH. UNITS TO CURBS ATTACH TO SUPPORTS W/ 1/2" LAG BOLTS x 2" LONG AT 24" O.C.

REVISIONS

NO.	DESCRIPTION	BY

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STRUCTURAL DETAILS  
**ACCURACY-GUN**  
DRAWING CONTENTS  
PRODUCT  
DATE: 5/10/92  
SCALE: VARIES  
BRANCH: K.B.  
JOB: ACCURACY  
SHEET: S-3  
OF 23 SHEETS