



CEMENTITIOUS GROUT

APPLICATION GUIDE

The following instructions detail the general installation procedures for grouts manufactured by The Euclid Chemical Company. The contractor and engineer are encouraged to consult the individual product's technical data sheet regarding possible additional suggestions for successful installations.

Note: If the contractor is not familiar with standard grout placement techniques, a pre-job meeting is suggested to review the project details unique to the particular job. Contact your local Euclid Chemical Company representative for additional information.

This guideline is written specifically for DRY PACK GROUT, EUCO RAPID GROUT, EUCO ROCK, EUCO PRE-CAST GROUT, HI-FLOW GROUT, TAMMSGROUT SUPREME, NC GROUT, and NS GROUT.

General Guidelines

Careful preparation is a must for a successful grouting operation. Grouts generally work best at 50°F to 80°F (10°C to 27°C). Cold weather retards strength gain and set time. Hot weather accelerates setting time and causes premature drying of the grout. Provide heating or cooling, as necessary, to compensate for extremes in ambient temperatures and resulting variations in cure time.

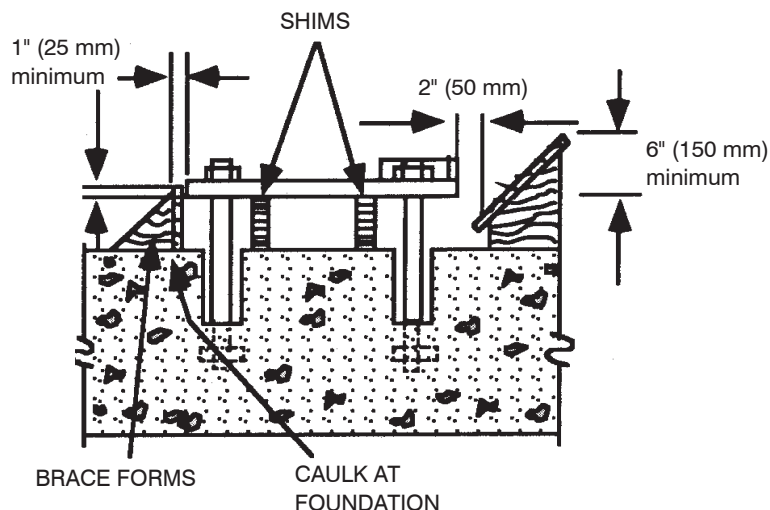
DIRECTIONS

Surface Preparation: Surfaces to be grouted and the underside of the baseplate should be clean and free from rust, grease, oil, laitance, and other contaminants. Concrete should be mechanically roughened to a Concrete Surface Profile (CSP) of 5-9 in accordance with ICRI 310.2R. Determine work schedule and plan for grout placement, then prepare strong, properly braced forms to retain the grout and provide relief holes, if needed. The concrete surface should be saturated with water and maintained in a saturated condition for a minimum of 24 hours before grouting. Remove all excess surface water immediately before grouting.

Forming: Forms should be rigid and sealed with caulk or sealant to prevent grout leakage. Forms should be coated with release agent but do not allow release agent to contact underside of the baseplate or the concrete surface.

Forms should extend at least 1" (2.5 cm) above the bottom of the baseplate on all sides. A headbox must be constructed on one side of the baseplate so that a pressure head can be developed. The headbox should begin 2" (5 cm) from the baseplate and slope away from the plate at approximately 45 degrees and provide a minimum grout head of 6" (15 cm). The headbox should be caulked/sealed to the form to generate the head pressure required to ensure proper grout flow. The form on the side opposite the headbox and forms parallel to grout flow should all be at least 1" (2.5 cm) from the plate edge. This allows air to vent during grout placement. Closer-fitting forms may cause air entrapment under the baseplate.

FIGURE 1 FORMING REQUIREMENTS



Mixing: Consult the technical data sheet for the correct amount of mixing water. Never exceed the maximum water content, as this will cause bleeding, segregation, and poor performance. Small quantities of grout may be mixed with a drill and paddle mixer. For large jobs, a mortar mixer can be used only if it provides high-shear mixing.

All materials should be in the proper temperature range of 50°F to 80°F (10°C to 27°C). Add the correct amount of clean, potable water to the mixing vessel and then add the dry grout. Mix for a minimum of 3 minutes. The flow of the grout should be measured with a flow cone and care taken to ensure the grout will not bleed with the amount of water that has been added. The mixed grout should be quickly transported to the headbox and placed immediately. (DRY PACK GROUT does not use a head box.) The amount of time the contractor has to place the grout varies from product to product. Consult the technical data sheet for typical setting times.

Do not add sand or cement to the grout since this may significantly change the grout's performance characteristics.

Grout Placement: Grouts should be placed quickly and continuously. Place grout from one side only, using the headbox, to assure complete filling of the space being grouted. Use a rod or strapping to assist in placement on large or difficult grouting configurations. Place grout only to the bottom edge of the baseplate.

Finishing and Curing: As soon as the sheen of water disappears and the grout has begun to stiffen, pond with water or cover with wet rags, burlap or plastic to prevent premature drying. The forms may be removed as soon as the grout has stiffened or set sufficiently to prevent sagging away from the bottom of the baseplate.

Cut back the shoulders of the grout to a 45 degree angle, sloping downward from the bottom of the baseplate to the foundation. Do not allow any excess grout to remain above the bottom edge of the baseplate or in an unchamfered shoulder. Finish the grout surface to the desired texture where required. Following cut back and finishing operations, apply two coats of a high solids curing compound to the grout. If a curing compound is not desired, keep all surfaces wet by sprinkling the surface with water then covering with wet burlap or polyethylene sheeting for a minimum of 72 hours.

Treatment of Shrinkage Cracks: Cracks in exposed grout (shoulders) typically do not propagate under the baseplate, and do not affect the vertical load-carrying capacity of the grout. However, if repair is desired, the surface of hairline cracks can be treated with a low-viscosity epoxy crack healer/sealer. Another acceptable option is to rout out and fill cracks by hand with a compatible grout.

PRECAUTIONS/LIMITATIONS

- Keep grout from freezing until it reaches a minimum strength of 3,000 psi (28 MPa).
- Proper curing is required.
- Do not add admixtures or fluidifiers, cement, or sand to the grout.
- Store bagged grout in a dry place.
- Do not use materials at temperatures that may cause premature freezing.
- When using in extreme conditions, follow the recommendations in ACI 305R "Guide to Hot Weather Concreting" or ACI 306R "Guide to Cold Weather Concreting".
- Employ cold weather or hot weather grout practices as the temperatures dictate.
- Do not use grouts as a topping or repair material.
- In all cases, consult the Safety Data Sheet before use.