

Reinforcing Bar Installation in Epoxy Grouts

The use of reinforcement bars is recommended in deep pours to minimize cracking and help transfer stress if cracks do occur. Steel reinforcement or "rebar" is recommended where the total thickness of the grout is greater than 6" (152 mm). No. 4 rebar, 1/2" (13 mm) in diameter, is the minimum size recommended for use with epoxy grout. All rust, dirt and grease should be removed. Sandblasting will provide best adhesion.

A typical rebar layout is shown in Figure 1. Most rebar should run lengthwise in the grout with cross bars and vertical dowels placed at approximately 12-24" (305-610 mm) intervals as shown in Figure 1. Rows of rebar should be between 6-12" (152-305 mm) apart. Grout pours of 6" (152 mm) require only one layer of horizontal rebar. Pours of 10" (254 mm) or more can benefit from an extra layer as shown in Figure 2. The horizontal rebar should be wired to vertical dowels that are grouted into the concrete base as shown in Figure 2. The horizontal and vertical bars are recommended to be constructed of 1/2" (13 mm) rebar and should be embedded to a depth of at least 6" (152 mm) in the concrete.

If the holes in the concrete are at least 1-1/2" (38 mm) in diameter, the bars can be grouted in place using standard machinery grout. If it is desirable to use smaller holes (e.g., about 1" [25 mm] in diameter), the bars should be grouted with a specially formulated rebar grout. None of the rebar should be closer than 2" (51 mm) to the nearest grout surface (Figure 3).

FIGURE 1

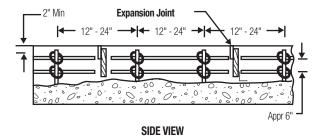


FIGURE 2

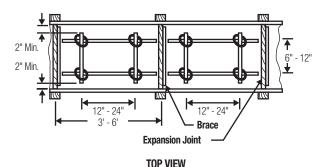
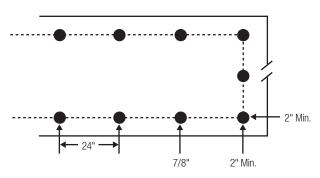


FIGURE 3



REBAR LAYOUT

