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SUPPLEMENT 6.9F-II BASE PLATES INSTALLATION GUIDELINES

SCOPE

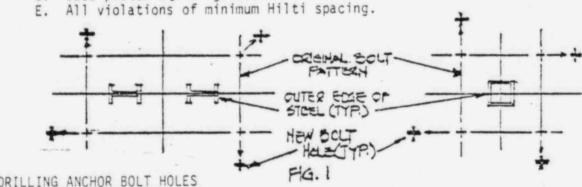
Construction guidelines for the installation of pipe support base plates and concrete anchor bolts which deviate from original design.

GENERAL

These guidelines apply only to pipe support base plates attached to structure with four (4) concrete anchor bolts.

Any of the following conditions require engineering evaluation, on a case by case basis, prior to design deviation in excess of construction tolerances:

- A. Base plates attached with more than or less than four (4) concrete anchors.
- Base plates attached with 14" Super Hilti anchor bolts. (all lengths)
- C. Core drilled base plate anchors.
- D. Base plates 11/2" or greater in thickness.



DRILLING ANCHOR BOLT HOLES

- 1. If the first anchor bolt hole cannot be drilled at original design location because of rebar, relocate it in an outwardly direction (away from steel member attachment) a short distance. Continue moving outwardly until hole can be successfully drilled.
- 2. Locate remaining holes in such a way that the final bolt hole pattern is as symmetrical as possible.

SUBSTITUTION OF ANCHOR BOLTS

1. If the new anchor bolt location varies from the original location, less than or equal to 2 inches, then use anchor size as specified on bill of material.

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- 2. If new anchor bolt location is greater than 2 inches from original bolt location, substitute the next larger size anchor bolt with the greatest stocked length. This is providing that the minimum Hilti bolt spacing criteria is met for that particular Hilti bolt size.
- 3. If next size anchor bolt cannot be installed due to spacing requirements, increase bolt length to the greatest stocked length of the original bolt diameter. In the case of 1" x 12" Hiltis, substitute with "Super" Hiltis of equal length.

NOTE:

Anchor bolt embedment length cannot exceed 80% of the thickness of the concrete slab or wall being attached to.

4. All structural steel attachments to base plates (i.e., wide flange, structural tubing, channel, etc.) must always be within the inner confines of the bolt hole pattern.

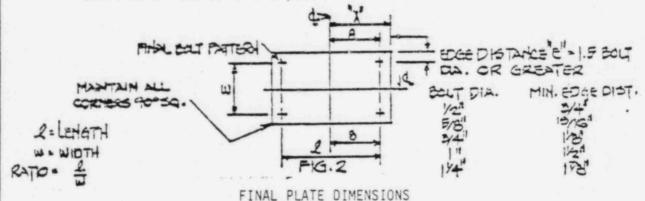


PLATE THICKNESS

If the length and/or width dimension increases from the original distance greater than 2 inches, increase the plate thickness to the next greater size. In the case of an increase of 6" or more in either direction, increase original plate thickness by $\frac{1}{2}$ ".

OVERALL PLATE DIMENSIONS

To maintain all corners square the "X" dimension must be determined. The easiest method is to compare dimensions A&B and select the largest. Add the necessary edge DIST (E) which is determined by the bolt size (see chart). Therefore, the distance "X" is from center line of the member to the edge of the plate.

X = A or B + E (select largest) Repeat this process for each side of plate.

