## CONCRETE FOUNDATION PREPARATION

 vital ${ }^{\mid T M}$ cluster box unit - 1570 " $F$ " Series

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## NEW CONCRETE BASE:

1) Depending on climatic and soil conditions in the area of installation, optional foundation material may be necessary as shown. Consult local building codes for recommendations.
2) Refer to Tablel for thickness (h), width (w), and depth (d) of the concrete pad alternatives.
3) Concrete shall have a compressive strength of 3000 psi @ 28 days, contain $4 \%$ min $\sim 6 \%$ max air entrapment and be placed with a 3.50~4.50 slump in accordance to 301 .
4) Use wire mesh as per (Standard) or fiber reinforced concrete as per (Standard).

## EXISTING CONCRETE BASE:

1) Existing concrete pad must be at least $48^{\prime \prime}$ wide.
2) Concrete base and anchor bolts may be reused if:
a. existing $1 / 2^{\prime \prime}$ diameter expansion anchor bolts are firmly embedded in the concrete and not damaged or corroded;
b. concrete foundation is not damaged; and
c. bolt hole pattern of the new unit matches the installed anchor bolts.
3) Additional considerations include:
a. if concrete is only 4 " thick, then option ' $b$ ' in Table 2 below cannot be used
b. any unused, existing anchor bolts must be cut flush to the level of the concrete surface
c. if concrete is damaged, replacement of foundation pad is required

TABLE 1: Pad Recommendations

| $h$ (Thickness) | $w$ (width) min | $\alpha$ (Depth) min |
| :---: | :---: | :---: |
| $4^{\prime \prime}$ | $47^{\prime \prime}$ | $47^{\prime \prime}$ |
| $5^{\prime \prime}$ | $44^{\prime \prime}$ | $44^{\prime \prime}$ |
| $6^{\prime \prime}$ | $42^{\prime \prime}$ | $42^{\prime \prime}$ |
| $7^{\prime \prime}$ | $40^{\prime \prime}$ | $40^{\prime \prime}$ |
| $8^{\prime \prime}$ | $39^{\prime \prime}$ | $39^{\prime \prime}$ |

TABLE 2:

## Expansion Anchor Bolt Recommendations

a. Hilti Kwik Bolt II (www.hilti.com)
$-1 / 2$ inch diameter $\times 51 / 2$ inches overall length

- Galvanized
- KB II 12-512, Stainless steel

Minimum embedment in concrete must be at least $31 / 2$ inches
b. ITW Ramset Redhead Turbolt (www.hilti.com)
$-1 / 2$ inch diameter $\times 7$ inches overall length

- Galvanized

Minimum embedment in concrete must be at least $41 / 8$ inches

## c. Rawl Stud (www.rawl.com)

$-1 / 2$ inch diameter $\times 51 / 2$ inches overall length

- Galvanized

Minimum embedment in concrete must be at least 4 inches

