

## Installation, Operation and Maintenance Manual

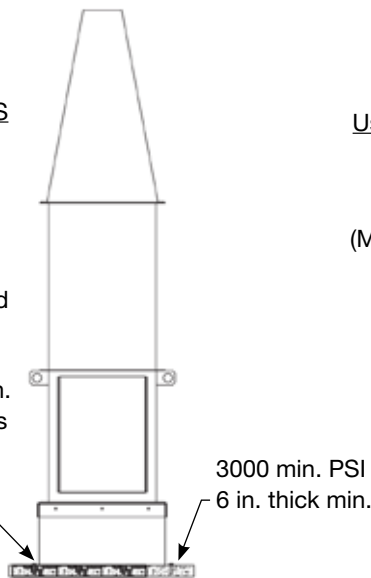
Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

### Installation methods for Greenheck Vektor-H and Vektor-HS fans with Miami-Dade NOA Certification per NOA No. 24-0123.02

Must be installed with Greenheck model GPFHD curb.

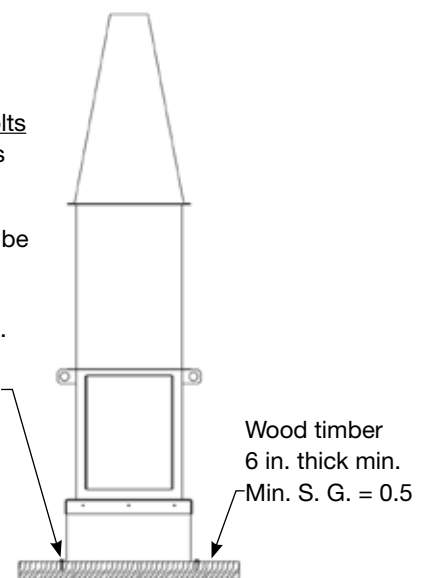
#### Concrete Deck Anchoring

Use 3/4 in. dia 300 Series SS  
Hilti Kwik Bolt TZ2  
Embedment: 4-1/2 in. min.  
Spacing: per table shown  
Edge distance: 6 in. min.  
End distance: 12 in. min.  
Assumed normal wt. cracked  
concrete  
f'c = 3 ksi min.  
Concrete thickness: 6 in. min.  
Concrete designed by others  
\*\*Install per manufacturer's  
instructions\*\*



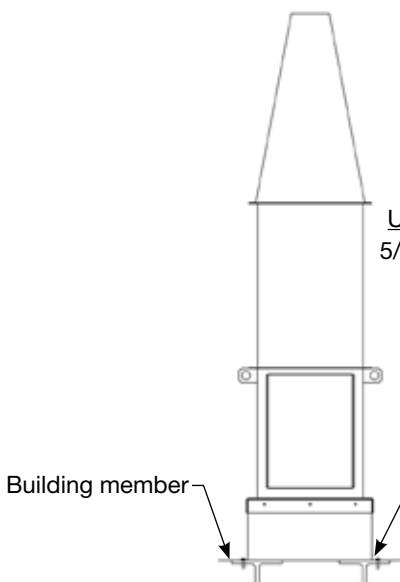
#### Timber Anchoring

Use 5/8 in. dia 316 SS Lag Bolts  
(S.G.=0.50 MIN) = Pre-drill as  
recommended  
Penetration – 5-7/8 in.  
(Min. of 3-7/8 in. of threads to be  
engaged into the wood)  
Spacing: per table shown  
Edge distance: 2-1/2 in. min.  
End distance: 4-3/8 in. min.  
Wood designed by others



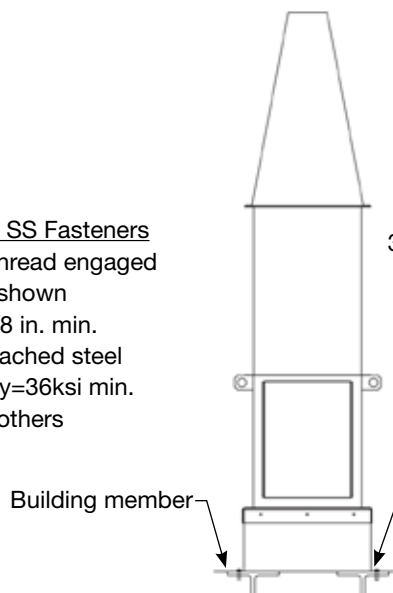
#### Steel Anchoring – Self Drill / Tap Fasteners

Use 5/16 in. dia 300 Series SS Fasteners  
5/16-18 fasteners with full thread engaged  
Spacing: per table shown  
Edge/end distance: 5/8 in. min.  
Assumed structurally attached steel  
5/16 in. ASTMA36 steel Fy=36ksi min.  
Steel designed by others



#### Steel Anchoring – Thru Bolts

Use 5/8 in. dia thru bolts  
300 Series SS Cond. CW. Fy=65ksi  
Spacing: per table shown  
Edge distance: 1-1/4 in. min.  
Assumed structurally attached  
5/16 in. thick ASTMA36 steel  
(Fy=36ksi min.)  
Steel designed by others



\*Fasteners installed per manufacturer's instructions.

| Model       | MINIMUM NUMBER OF FASTENERS PER SIDE TO ATTACH CURB TO STRUCTURE (excludes 4 corner fasteners)<br>USE ONE 2 in. x 2 in. x 1/4 in. SQUARE WASHER UNDER ALL FASTENERS |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
|-------------|---|-----|-----|----------------------------|-----|-----|------------------|-----|-----|--------------------------------|-----|-----|---|----|----|---|----|----|
|             | Concrete Deck Anchoring   |     |     | Steel Anchoring Thru Bolts |     |     | Timber Anchoring |     |     | Steel Anchoring Self-Drill/Tap |     |     |   |    |    |   |    |    |
|             | 1x1 or fan only   | 2x1 | 3x1 | 1x1 or fan only            | 2x1 | 3x1 | 1x1 or fan only  | 2x1 | 3x1 | 1x1 or fan only                | 2x1 | 3x1 |   |    |    |   |    |    |
| Vektor-H-9  | 4   | 9   | 14  | 2                          | 5   | 8   | 5                | 10  | 16  | 7                              | 13  | 20  |   |    |    |   |    |    |
| Vektor-H-10 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-12 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-13 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-14 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-16 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-18 |   | 8   | 13  |                            |     |     | 3                | 6   | 9   |                                |     |     | 6 | 12 | 18 | 8 | 14 | 22 |
| Vektor-H-20 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-22 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-24 | 5   | 10  | 15  | 3                          | 6   | 9   | 6                | 12  | 18  | 8                              | 14  | 22  |   |    |    |   |    |    |
| Vektor-H-30 |   |     |     |                            |     |     |                  |     |     |                                |     |     |   |    |    |   |    |    |
| Vektor-H-36 |   |     |     |                            |     |     |                  |     |     |                                |     |     | 6 | 12 | 18 | 7 | 11 | 8  |

### Curb Fasteners

Curb to be Greenheck model GPFHD.

