# OMFAB Anchorage Assembly *Tied Anchorage Solutions*

The OMFAB anchorage assembly with additional slab reinforcing is an economical alternative for applications where 2½" (or greater) edge distance exists.

## OMFAB Anchor Assemblies

| Model No. | Anchor Rod | | Embed. $l_e$ (in) | Bearing Plate Size (in) |
|---|---|---|---|---|
| | Quantity | Diameter (in) | | |
| **6" Columns** | | | | |
| OMFAB6-14-KT | 2 | ⅝ | 8½ | ⅜ x 3 x 5½ |
| OMFAB6-18-KT | 2 | ⅝ | 12½ | ⅜ x 3 x 5½ |
| OMFAB6-24-KT | 2 | ⅝ | 18½ | ⅜ x 3 x 5½ |
| OMFAB6-30-KT | 2 | ⅝ | 24½ | ⅜ x 3 x 5½ |
| OMFAB6-36-KT | 2 | ⅝ | 30½ | ⅜ x 3 x 5½ |
| **9", 12" and 15" Columns** | | | | |
| OMFAB9-18-KT | 4 | ⅝ | 12½ | ⅜ x 5½ x 5½ |
| OMFAB9-24-KT | 4 | ⅝ | 18½ | ⅜ x 5½ x 5½ |
| OMFAB9-24HS-KT | 4 | ⅝ | 18½ | ⅜ x 6¾ x 6¾ |
| OMFAB9-30-KT | 4 | ⅝ | 24½ | ⅜ x 5½ x 5½ |
| OMFAB9-30HS-KT | 4 | ⅝ | 24½ | ⅜ x 6¾ x 6¾ |
| OMFAB9-36-KT | 4 | ⅝ | 30½ | ⅜ x 5½ x 5½ |
| OMFAB9-36HS-KT | 4 | ⅝ | 30½ | ⅜ x 6¾ x 6¾ |

1. OMFAB-KT anchor assemblies are pre-engineered anchorage solutions for tension only.
2. For embedment depth, $d_e$, required. See tension anchorage solutions below.
3. Additional reinforcing ties or hairpins are required for shear when Strong Frame™ ordinary moment frame column is place at edge of slab. See tied anchorage solutions for reinforcing requirements and allowable shear capacities.

## OMFAB Tied Anchorage Shear Capacities

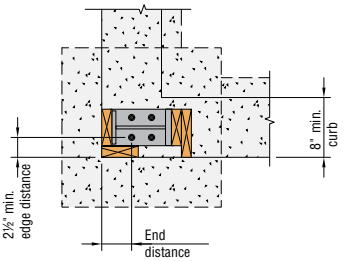
| Column Size | Stemwall/Curb Tied Anchorage Solutions | | | Slab on Grade Hairpin Solutions | |
|---|---|---|---|---|---|
| | Tie Size and Number | Tie Spacing | Allowable ASD Shear | Tie Size and Number | Allowable ASD Shear |
| C6 | NS | NS | NA | 2 - #3 | 5725 |
| C9 | 3 - #3 | 3" | 8345 | 2 - #3 | 11450 |
| | 4 - #3 | 2" | 9735 | — | — |
| C12 | 3 - #3 | 3" | 8345 | 2 - #3 | 11450 |
| | 5 - #3 | 1.75" | 13295 | 4 - #3 | 23690 |
| C15 | 3 - #3 | 3" | 8345 | 2 - #3 | 11450 |
| | 5 - #3 | 1.75" | 13295 | 4 - #3 | 23690 |

1. Tied anchorage solutions require Strong Frame™ column to be located in from the edge of slab. For solutions with column at edge of slab, use OMFSL.
2. Ties or hairpins shall be ASTM A615 or A706, Grade 60 reinforcing. Ties are not supplied by Simpson Strong-Tie® and must be furnished by contractor.
3. Curb-tied anchorage solutions may also be used for slab on grade installations.
4. Shaded values require high-strength OMFAB-HS anchorage assemblies.
5. NS = No solution

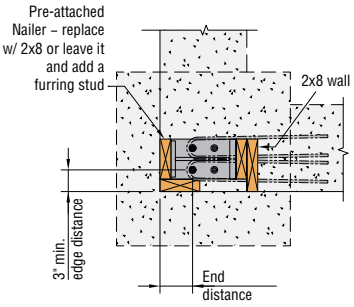
## Tension Anchorage Solutions for 2006 IBC Loads[1,2,3,4,5]

| Column Size | Nominal Heights | Wind[1] | | | | Seismic[2] | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Uncracked Concrete | | Cracked Concrete | | Uncracked Concrete | | Cracked Concrete | |
| | | W | $d_e$ | W | $d_e$ | W | $d_e$ | W | $d_e$ |
| C6 | 8'–12' | 12 | 6 | 14 | 6 | 24 | 8 | 27 | 9 |
| | 14'–19' | | | 12 | | 15 | 6 | 18 | 6 |
| C9 | 8'–12' | 18 | 6 | 21 | 6 | 38 | 12 | 43 | 14 |
| | 14'–19' | 12 | 6 | 14 | 6 | 26 | 8 | 30 | 9 |
| C12 | 8' | 23 | 7 | 26 | 8 | 46 | 15 | 53 | 17 |
| | 9'–12' | 23 | 7 | 26 | 8 | 40 | 13 | 46 | 15 |
| | 14'–19' | 16 | 6 | 19 | 6 | 34 | 11 | 39 | 12 |
| C15 | 8'–9' | 27 | 8 | 31 | 10 | 54 | 17 | 62 | 20 |
| | 10'–19' | 24 | 7 | 28 | 9 | 40 | 13 | 46 | 15 |

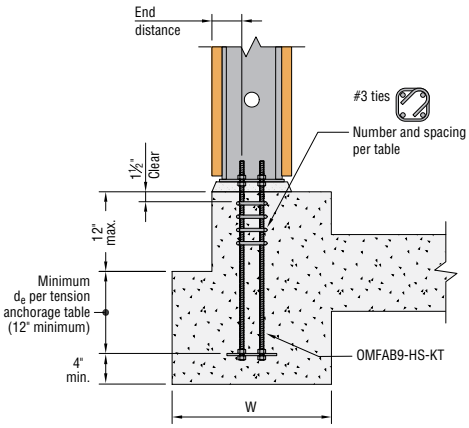
1. Wind includes Seismic Design Category A and B
2. Seismic denotes Seismic Design Category C through F. Detached 1 and 2 family dwellings in SDC C may use wind solutions.
3. Anchorage solutions are also applicable to designs under the 2000 and 2003 IBC.
4. Shaded values require high strength threaded rods per ASTM A449.
5. Footing dimensions are the minimum required for concrete anchorage requirements only. The Designer must determine required footing size and reinforcing for other design limits.
6. For anchorage solutions where edge distances greater than 2½" exist, see the OMFAB anchorage assemblies below.
7. Uncracked values include $\Psi_{c,N}$ = 1.25 factor per ACI 318-05 D5.2.6. Designer shall evaluate cracking at service load levels and select appropriate cracked or uncracked solution.
8. 2500 psi concrete minimum.



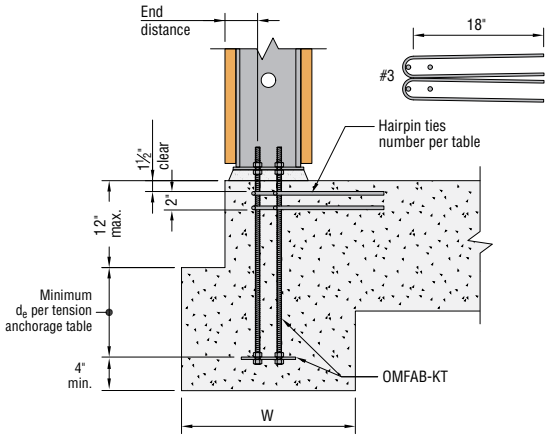

**Plan View – Curb/Stemwall**




**Plan View – Slab on Grade**




**Section at Curb/Stem**




**Section at Slab on Grade**