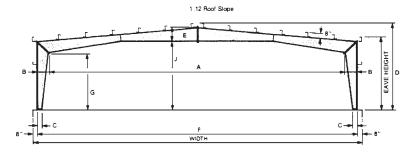
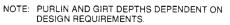


FIGURE 4.8 Various column profiles. (VP Buildings.)



**FIGURE 4.9** This open-front industrial facility is ideally suited to single-span rigid-frame construction. (*Photo: Maguire Group Inc.*)





| WIDTH | EAVE<br>Height<br>(Actual) | *20 PSF LL |         |        |        |         | <b>30</b> PSF LL |         |        |         |         | 40 PSF LL |         |        |         |         |
|-------|----------------------------|------------|---------|--------|--------|---------|------------------|---------|--------|---------|---------|-----------|---------|--------|---------|---------|
|       |                            | A          | D       | E      | G      | J       | A                | D       | E      | G       | J       | A         | D       | E      | G       | J       |
|       | 10'-0"                     | 27'-1"     | 11'-3"  |        | 8'-8"  | 9'-10"  | 25'-11"          | 11'-3*  | 1'-0"  | 8'-1"   | 9'-7"   | 25'-7"    | 11'-3"  | 1'-2"  | 7'-11*  | 9'-5"   |
|       | 12'-0"                     | 27'-1"     | 13'-3"  | 97     | 10'-8" | 11/-10* | 25'-11"          | 13'-3"  | 1'-0"  | 10'-1"  | 11'-7"  | 25'-7"    | 13'-3"  | 1'-2"  | 9'-11"  | 11'-5"  |
| 30    | 14'-0"                     | 27'-1"     | 15'-3"  | 9"     | 12'-8" | 13'-10" | 25'-11"          | 15'-3"  | 1'-0"  | 12'-1"  | 13'-7"  | 25'-7"    | 15'-3"  | 1'-2"  | 11'-11" | 13'-5"  |
| 63    | 16'-0'                     | 27'-1"     | 17'-3"  | 9"     | 14'-8" | 15'-10" | 25'-11"          | 17'-3"  | 1'-0"  | 14'-1"  | 15'-7"  | 25'-7"    | 17'-3"  | 1'-2"  | 13'-11" | 15'-5"  |
|       | 20'-0*                     | 26'-9"     | 21'-3"  | 9"     | 18'-6" | 19'-10" | 25'-11"          | 21'-3"  | 1'-0"  | 18'-1"  | 19'-7"  | 25'-7*    | 21'-3"  | 1'-2"  | 17'-11" | 19'-5"  |
| 40    | 10'-0"                     | 36'-1 "    | 11'-8"  | 9"     | 8'-2"  | 10'-3"  | 35'-1"           | 11'-8"  | 1'-2"  | 7'-8"   | 9'-10"  | 34'-7"    | 11'-8"  | 1'-5"  | 7'-6"   | 9'-7"   |
|       | 12'-0"                     | 36'-1"     | 13'-8"  | 9*     | 10'-2" | 12'-3"  | 35'-1"           | 13'-8"  | 1'-2"  | S'-8"   | 11'-10" | 34'-7"    | 13'-8"  | 1'-5"  | 9'-6"   | 11'-7"  |
|       | t4'-0"                     | 36'-1"     | 15'-6"  | 9"     | 12'-2" | 14'-3"  | 35'-1"           | 15'-8"  | 1'-2"  | 11'-8"  | 13'-10" | 34'-7"    | 15'-8"  | 1'-5"  | 11'-6"  | 13'-7"  |
|       | 16'-0"                     | 36'-1"     | 17'-8"  | 9"     | 14'-2" | 16'-3"  | 35'-1"           | 17'-8"  | 1'-2"  | 13'-8"  | 15'-10" | 34'-7*    | 17'-8"  | 1'-5"  | 13'-6"  | 15'-7"  |
|       | 20'-0"                     | 36'-1"     | 21'-8"  | 9"     | 18'-2" | 20'-3"  | 35'-1"           | 21'-8"  | 1'-2"  | 17'-8"  | 19'-10" | 34'-7"    | 21'-8"  | 1'-5"  | 17'-6"  | 19'-7"  |
| 50    | 12'-0"                     | 45'-3"     | 14'-1"  | 1'-2"  | 9'-9"  | 12'-3"  | 43'-11"          | 14'-1"  | 1'-11" | 9'-2"   | 11'-6"  | 43'-10"   | 14'-1"  | 1'-11" | 9'-2"   | 11'-6"  |
|       | 14'-0"                     | 45'-3"     | 16'-1"  | 1'-2"  | 11'-9" | 14'-3"  | 43'-11"          | 16'-1"  | 1'-11" | 11'-2"  | 13'-6"  | 43'-10"   | 16'-1"  | 1'-11" | 11'-2"  | 13'-6"  |
|       | 16'-0"                     | 45'-3"     | 18'-1"  | 1'-2"  | 13'-9" | 16'-3"  | 43'-11"          | 18'-1"  | 1'-11" | 13'-2"  | 15'-6"  | 43'-10"   | 18'-1"  | 1'-11" | 13'-2"  | 15'-6"  |
|       | 20'-0"                     | 45'-3"     | 22'-1"  | 1'-2"  | 17'-9" | 20'-3"  | 43'-11"          | 22'-1"  | 1'-11" | 17'-2"  | 19'-6"  | 43'-10"   | 22'-1"  | 1'-11" | 17'-2"  | 19'-6"  |
|       | 24'-0"                     | 45'-3"     | 26'-1"  | 1'-2"  | 21'-9" | 24'-3"  | 43'-11"          | 26'-1"  | 1'-11" | 21'-2"  | 23'-6"  | 43'-10"   | 26'-1"  | 1'-11" | 21'-2"  | 23'-6"  |
| 60    | 12'-0"                     | 55'-2"     | 14'-6"  | 1'-5"  | 9'-9"  | 12'-5"  | 53'-4"           | 14'-6"  | 2'-1"  | 8'-11"  | 11'-9"  | 52'-8"    | 14'-6"  | 2'-1"  | 8'-7"   | 11'-9"  |
|       | 14'-0"                     | 55'-2"     | 16'-6"  | 1'-5"  | 11'-9" | 14'-5"  | 53'-4"           | 16'-6"  | 2'-1"  | 10'-11" | 13'-9"  | 52'-8"    | 16'-6"  | 2'-1"  | 10'-7"  | 13'-9"  |
|       | 16'-0"                     | 55'-2"     | 18'-6"  | 1'-5"  | 13'-9" | 16'-5"  | 53'-4"           | 18'-6"  | 2'-1"  | 12'-11" | 15'-9"  | 52'-8"    | 18'-6"  | 2'-1"  | 12'-7"  | 15'-9"  |
|       | 20'-0"                     | 55'-2"     | 22'-6"  | 1'-5"  | 17'-9" | 20'-5"  | 53'-4"           | 22'-6"  | 2'-1"  | 16'-11" | 19'-9"  | 52'-8"    | 22'-6"  | 2'-1"  | 16'-7"  | 19'-9"  |
|       | 24'-0"                     | 55'-2"     | 26'-6"  | 1'-5"  | 21'-9" | 24'-5"  | 53'-4"           | 26'-6"  | 2'-1"  | 20'-11" | 23'-9"  | 52'-8"    | 26'-6"  | 2'-1"  | 20'-7"  | 23'-8"  |
|       | 12'-0"                     | 63'-11"    | 14'-11" | 1'-9"  | 9'-2"  | 12'-6"  | 62'-6"           | 14'-11" | 2'-5*  | 8'-7"   | 11'-10" | 61'-10"   | 14'-11" | 2'-9"  | 8'-3"   | 11'-6"  |
| _     | 14'-0"                     | 63'-11"    | 16'-11" | 1'-9"  | 11'-2" | 14'-6"  | 62'-6"           | 16'-11" | 2'-5"  | 10'-7"  | 13'-10" | 61'-10"   | 16'-11" | 2'-9"  | 10'-3"  | 13'-6"  |
| 70    | 16'-0"                     | 63'-11"    | 18'-11" | 1'-9"  | 13'-2* | 16'-6"  | 62'-6"           | 18'-11" | 2'-5"  | 12'-6"  | 15'-10" | 61'-10"   | 18'-11" | 2'-9"  | 12'-3"  | 15'-6"  |
|       | 20'-0"                     | 63'-11"    | 22'-11" | 1'-9"  | 17'-2" | 20'-6"  | 62'-6"           | 22'-11" | 2'-5"  | 16'-6"  | 19'-10" | 61'-10"   | 22'-11  | 2'-9"  | 16'-3"  | 19'-6"  |
|       | 24'-0"                     | 63'-11"    | 26'-11" | 1'-9"  | 21'-2" | 24'-6"  | 62'-6"           | 26'-11" | 2'-5"  | 20'-6"  | 23'-10" | 61'-10"   | 26'-11" | 2'-9"  | 20'-3"  | 23'-5"  |
|       | 12'-0"                     | 73'-7 *    | 15'-4"  | 1'-11* | 9'-0"  | 12'-9"  | 71'-10"          | 15'-4"  | 2'-7"  | 8'-3"   | 12'-1"  | 71'-2"    | 15'-4"  | 2'-10" | 7'-11*  | 11'-10" |
|       | 14'-0"                     | 73'-6"     | 17'-4"  | 1'-11" | 11'-0" | 14'-9"  | 71'-10"          | 17'-4"  | 2'-7"  | 10'-3"  | 14'-1"  | 71'-2"    | 17'-4"  | 2'-10" | 9'-11"  | 13'-10" |
| 80    | 16'-0"                     | 73'-6"     | 19'-4"  | 1'-11" | 13'-0" | 16'-9"  | 71'-10"          | 19'-4"  | 2'-7"  | 12'-3"  | 16'-1"  | 71'-2"    | 19'-4"  | 2'-10" | 11'-11" | 15'-10" |
| ω     | 20'-0"                     | 73'-6"     | 23'-4"  | 1'-11" | 17'-0" | 20'-9"  | 71'-10"          | 23'-4"  | 2'-7"  | 16'-3"  | 20'-1"  | 71'-2"    | 23'-4"  | 2'-10" | 15'-11" | 19'-9"  |
|       | 24'-0"                     | 73'-6"     | 27'-4"  | 1'-11" | 21'-0" | 24'-9"  | 71'-10"          | 27'-4"  | 2'-7"  | 20'-3"  | 24'-1"  | 71'-2"    | 27'-4"  | 2'-10" | 19'-11" | 23'-9"  |
| 00    | 14'-0"                     | 92'-2"     | 18'-2"  | 2'-4"  | 10'-5" | 15'-1"  | 90'-10"          | 18'-2"  | 2'-10" | 9'-9"   | 14'-8"  | 89'-10"   | 18'-2"  | 3'-5"  | 9'-4"   | 14'-1"  |
|       | 16'-0"                     | 92'-2"     | 20'-2"  | 2'-4"  | 12'-5" | 17'-1"  | 90'-10"          | 20'-2"  | 2'-10" | 11'-9"  | 16'-7"  | 89'-10"   | 20'-2"  | 3'-5"  | 11'-4"  | 16'-1"  |
|       | 20'-0"                     | 92'-2"     | 24'-2"  | 2'-4"  | 16'-5" | 21'-1"  | 90'-10"          | 24'-2"  | 2'-10" | 15'-9"  | 20'-7"  | 89'-10"   | 24'-2"  | 3'-5"  | 15'-3"  | 20'-0"  |
| T     | 24'-0"                     | 92'-2"     | 28'-2"  | 2'-4"  | 20'-5" | 25'-1"  | 90'-10"          | 28'-2"  | 2'-10" | 19'-9"  | 24'-7"  | 89'-10"   | 28'-2"  | 3'-5"  | 19'-4"  | 24'-0"  |
|       | 14'-0"                     | 110'-10"   | 19'-0"  | 2'-10" | 9'-9"  | 15'-6"  | 109'-10"         | 19'-0"  | 3'-4"  | 9'-4"   | 15'-0"  | 108'-10"  | 19'-0"  | 4'-2"  | 8'-10"  | 14'-2"  |
| 0     | 16'-0"                     | 110'-10"   | 21'-0"  | 2'-10" | 11'-9" | 17'-6"  | 109'-10"         | 21'-0"  | 3'-4"  | 11'-4"  | 17'-0"  | 108'-10"  | 21'-0"  | 4'-2"  | 10'-10" | 16'-2"  |
| 120   | 20'-0"                     | 110'-10"   | 25'-0"  | 2'-10" | 15'-9" | 21'-6"  | 109'-10"         | 25'-0"  | 3'-4"  | 15'-4"  | 21'-0"  | 108'-10"  | 25'-0"  | 4'-2*  | 14'-10" | 20'-2"  |
|       | 24'-0"                     | 110'-10"   | 29'-0"  | 2'-10" | 19'-9" | 25'-6*  | 109'-10"         | 29'-0"  | 3'-4"  | 19'-4"  | 25'-0"  | 108'-10"  | 29'-0"  | 4'-2"  | 18'-10" | 24'-2"  |
|       | 30'-0"                     | 110'-10"   | 35'-0"  | 2'-10" | 25'-9" | 31'-6"  | 109'-10"         | 35'-0"  | 3'-4"  | 25'-4"  | 31'-0"  | 108'-10"  | 35'-0"  | 4'-2"  | 24'-10" | 30'-2"  |

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Dimensions shown are for 25' bays, 20' and 30' bays also available Building components and dimensions shown are subject to change due to final design.

FIGURE 4.10 Typical dimensions of low-profile single-span rigid frame. (Metallic Building Systems.)

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