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| METAL BUILDING SYSTEMS - STRUCTURAL SYSTEMS (NOTE 1) | | | | | | | | | |
|--|---|---|--------------------------------------|----------------------------------|---------------------|---------------------|------------------|--|--|
| MANUFACTURER/ MODEL | TYPICAL BLDG. WIDTH FEET (M) | TYPICAL EAVE HEIGHT FEET (M) | BAY SPACINGS FEET (M) | CONFIG. | COLUMN TYPE | RAFTER TYPE | GIRT TYPE | MIN. SLOPE INCHES (RATIO) | MAX. SLOPE INCHES (RATIO) |
| ALLIANCE STEEL, INC. | | | | | | | | | |
| HRF Clear Span | 20 - 250 (6.1 - 76.2) | 10 - 40 (3.0 - 12.2) | 20, 25 (6.1, 7.6) | Gabled | Tapered | Tapered | Flush | 2:12 (1:6) | 6:12 (1:2) |
| LRF Clear Span | 20 - 250 (6.1 - 76.2) | 10 - 40 (3.0 - 12.2) | 20, 25 (6.1, 7.6) | Gabled | Tapered | Tapered | Flush | 0.25:12 (1:48) | 2:12 (1:6) |
| LT | 20 - 80 (6.1 - 24.4) | 10 - 40 (3.0 - 12.2) | 20, 25 (6.1, 7.6) | Lean to | Straight | Straight or tapered | Flush | 0.25:12 (1:48) | 6:12 (1:2) |
| SCRF | 20 - 60 (6.1 - 18.3) | 10 - 20 (3.0 - 6.1) | 20, 25 (6.1, 7.6) | Gabled | Straight | Tapered | Flush | 1:12 (1:12) | 2:12 (1:6) |
| SS Series | 20 - 250 (6.1 - 76.2) | 10 - 40 (3.0 - 12.2) | 20, 25 (6.1, 7.6) | Single slope | Straight or tapered | Straight or tapered | Flush | 0.25:12 (1:48) | 6:12 (1:2) |
| TB | 20 - 80 (6.1 - 24.4) | 10 - 24 (3.0 - 7.3) | 20, 25 (6.1, 7.6) | Gabled | Straight | Straight or tapered | Flush | 1:12 (1:12) | 1:12 (1:12) |
| AMERICAN BUILDINGS COMPANY; DIVISION OF MAGNATRAX CORP. | | | | | | | | | |
| GS | 20 - 160 (6.1 - 48.8) | 10 - 30 (3.0 - 9.1) | 20, 25, 30 (6.1, 7.6, 9.1) | Gabled | Straight or tapered | Straight or Tapered | Bypass or inset | 0.25:12 (1:48) | 6:12 (1:2) |
| LT | 10 - 40 (3.0 - 12.2) | 10 - 24 (3.0 - 7.3) | 20, 25, 30 (6.1, 7.6, 9.1) | Lean to | Straight | Tapered | Bypass | 0.25:12 (1:48) | Varies |
| SS | 20 - 140 (6.1 - 42.7) | 12 - 24 (3.6 - 7.3) | 20, 25, 30 (6.1, 7.6, 9.1) | Single slope | Straight or tapered | Straight or Tapered | Bypass or inset | 0.25:12 (1:48) | 6:12 (1:2) |
| AMERICAN STEEL BUILDING CO., INC. | | | | | | | | | |
| High Rigid Frame (HRF) | 10 - 300 (3.0 - 91.4) | Up to 100+ (Up to 30.5+) | 20, 25, 30 (6.1, 7.6, 9.1) | Gabled | Tapered | Tapered | Flush or bypass | 4:12 (1:3) | 12:12 (1:1) |
| Low Rigid Frame (LRF) | 10 - 350 (3.0 - 106.7) | Up to 100+ (Up to 30.5+) | 20, 25, 30 (6.1, 7.6, 9.1) | Gabled | Tapered | Tapered | Flush or bypass | 1:12 (1:12) | 1:12 (1:12) |
| Shed or Single Slope | 10 - 150 (3.0 - 45.7) | Up to 100+ (Up to 30.5+) | 20, 25, 30 (6.1, 7.6, 9.1) | Single slope or lean to | Straight or tapered | Straight or tapered | Flush or bypass | 0.5:12 (1:24) | 12:12 (1:1) |
| Slant Beam (SB) | 10 - 70 (3.0 - 21.3) | Up to 100+ (Up to 30.5+) | 20, 25, 30 (6.1, 7.6, 9.1) | Gabled | Straight | Tapered beam | Flush | 0.5:12 (1:24) | 12:12 (1:1) |
| BEHLEN MFG. CO. | | | | | | | | | |
| Gabled Clear Span | Up to 175 (Up to 53.3) | Up to 99 (Up to 30.2) | 10 - 60 (3.0 - 18.3) | Gabled | Straight or tapered | Straight or tapered | Flush or bypass | 0.25:12 (1:48) | 6:12 (1:2) |
| Single Slope Clear Span | Up to 120 (Up to 36.6) | Up to 99 (Up to 30.2) | 10 - 60 (3.0 - 18.3) | Single slope | Straight or tapered | Straight or tapered | Flush or bypass | 0.25:12 (1:48) | 6:12 (1:2) |
| BUTLER MANUFACTURING COMPANY; A BLUESCOPE STEEL COMPANY | | | | | | | | | |
| Widespan | 10+ (3.0+) | 8 - 60 (2.4 - 18.3) | 16 - 30 (3.0 - 9.1) | Gabled, single slope, or lean to | Straight or tapered | Straight or tapered | Flush or bypass | 0.25:12 (1:48) | 4:12 (1:3) |
| CECO BUILDING SYSTEMS; DIVISION OF NCI BUILDING SYSTEMS, L.P. | | | | | | | | | |
| Flush Wall Clear Span (FW) | 20 - 70 (6.1 - 21.3) | 9 - 20 (2.7 - 6.1) | 25 (7.6) | Gabled | Straight | Straight | Flush or inset | 1:12 (1:12) | 4:12 (1:3) |

| METAL BUILDING SYSTEMS - STRUCTURAL SYSTEMS (NOTE 1) | | | | | | | | | |
|---|---|---|--|----------------|---------------------|---------------------|-------------------------|--|--|
| MANUFACTURER/ MODEL | TYPICAL BLDG. WIDTH FEET (M) | TYPICAL EAVE HEIGHT FEET (M) | BAY SPACINGS FEET (M) | CONFIG. | COLUMN TYPE | RAFTER TYPE | GIRT TYPE | MIN. SLOPE INCHES (RATIO) | MAX. SLOPE INCHES (RATIO) |
| Lean To (LT) | 10 - 60 (3.0 - 18.3) | 9 - 60 (2.7 - 18.3) | 10 - 30 (3.0 - 9.1) | Lean to | Straight | Tapered | Bypass or inset | 1:12 (1:12) | 6:12 (1:2) |
| Rigid Frame Clear Span (RF) | 20 - 160 (6.1 - 48.8) | 9 - 60 (2.7 - 18.3) | 25 (7.6) | Gabled | Straight or tapered | Tapered | Flush, bypass, or inset | 0.25:12 (1:48) | 1:12 (1:12) |
| Single Slope Clear Span (SS) | 20 - 160 (6.1 - 48.8) | 9 - 57 (2.7 - 17.4) | 25 (7.6) | Single slope | Straight or tapered | Tapered | Flush, bypass, or inset | 0.25:12 (1:48) | 1:12 (1:12) |
| Tapered Beam Straight Column (TB) | 15 - 70 (4.6 - 21.3) | 9 - 30 (2.7 - 9.1) | 25 (7.6) | Gabled | Straight | Tapered beam | Flush, bypass, or inset | 0.25:12 (1:48) | 1:12 (1:12) |
| GARCO BUILDING SYSTEMS; DIVISION OF NCI BUILDING SYSTEMS, L.P. | | | | | | | | | |
| BRF System (Beam Rigid Frame) | 20 - 80 (6.1 - 24.4) | 8 - 14 (2.4 - 4.3) | 12, 16, 20, 24 (3.7, 4.9, 6.1, 7.3) | Gabled | Straight | Straight | Bypass | 1:12 (1:12) | 4:12 (1:3) |
| PWU System (Parallel Flange Wing Unit) | 12 - 50 (3.7 - 15.2) | Any | Any | Lean to | Straight | Straight | Bypass | 0.25:12 (1:48) | 12:12 (1:1) |
| RF System (Rigid Frame) | 30 - 50 (9.1 - 15.2) | Any | Any | Gabled | Tapered | Straight | Flush or bypass | 1:12 (1:12) | 4:12 (1:3) |
| SSTRF System (Single Slope Tapered Rigid Frame) | 30 - 100 (9.1 - 30.5) | Any | Any | Single slope | Straight or tapered | Straight or tapered | Flush or bypass | 0.25:12 (1:48) | 12:12 (1:1) |
| TBC System (Tapered Beam and Column) | 20 - 80 (6.1 - 24.4) | Any | Any | Gabled | Straight | Tapered beam | Flush or bypass | 0.25:12 (1:48) | 1:12 (1:12) |
| TRF System (Tapered Rigid Frame) | 60 - 300 (18.3 - 91.4) | Any | Any | Gabled | Tapered | Tapered | Flush or bypass | 1:12 (1:12) | 4:12 (1:3) |
| TWU System (Tapered Beam Wing Unit) | 50 - 80 (15.2 - 24.4) | Any | Any | Lean to | Straight | Tapered | Flush or bypass | 0.25:12 (1:48) | 12:12 (1:1) |
| GULF STATES MANUFACTURERS, INC.; DIVISION OF MAGNATRAX CORP. | | | | | | | | | |
| Model LT | 15 - 40 (4.6 - 12.2) | 10 - 24 (3.0 - 7.3) | 20, 25, 30 (6.1, 7.6, 9.1) | Lean to | Straight | Straight or tapered | Flush or bypass | 0.5:12 (1:24) | 4:12 (1:3) |
| Model RF | 20 - 120 (6.1 - 36.6) | 10 - 24 (3.0 - 7.3) | 20, 25, 30 (6.1, 7.6, 9.1) | Gabled | Straight or tapered | Straight or tapered | Flush or bypass | 1:12 (1:12) | 4:12 (1:3) |
| Model SSRF | 20 - 80 (6.1 - 24.4) | 10 - 24 (3.0 - 7.3) | 20, 25, 30 (6.1, 7.6, 9.1) | Single slope | Straight or tapered | Straight or tapered | Flush or bypass | 0.5:12 (1:24) | 4:12 (1:3) |
| KIRBY BUILDING SYSTEMS; DIVISION OF MAGNATRAX CORP. | | | | | | | | | |
| BC | 80 - 400 (24.4 - 121.9) | 12 - 30 (3.7 - 9.1) | 15 - 30 (4.6 - 9.1) | Gable | Straight or tapered | Straight or tapered | Bypass | 0.25:12 (1:48) | 4:12 (1:3) |
| LT | 15 - 70 (4.6 - 21.3) | N/A | N/A | Lean to | Straight | Straight or tapered | Bypass | 0.25:12 (1:48) | 4:12 (1:3) |
| RF | 20 - 150 (6.1 - 45.7) | 10 - 30 (3.0 - 9.1) | 15 - 30 (4.6 - 9.1) | Gable | Straight or tapered | Straight or tapered | Bypass | 0.25:12 (1:48) | 4:12 (1:3) |
| SS | 20 - 200 | 10 - 30 | 15 - 30 | Single slope | Straight or | Straight or | Bypass | 0.25:12 | 4:12 |

| METAL BUILDING SYSTEMS - STRUCTURAL SYSTEMS (NOTE 1) | | | | | | | | | |
|--|---|---|--------------------------------------|-------------------------------------|------------------------|------------------------|----------------------------|--|--|
| MANUFACTURER/ MODEL | TYPICAL BLDG. WIDTH FEET (M) | TYPICAL EAVE HEIGHT FEET (M) | BAY SPACINGS FEET (M) | CONFIG. | COLUMN TYPE | RAFTER TYPE | GIRT TYPE | MIN. SLOPE INCHES (RATIO) | MAX. SLOPE INCHES (RATIO) |
| | (6.1 - 61.0) | (3.0 - 9.1) | (4.6 - 9.1) | | tapered | tapered | | (1:48) | (1:3) |
| MESCO BUILDING SOLUTIONS; DIVISION OF NCI BUILDING SYSTEMS, L.P. | | | | | | | | | |
| Gable (Symmetrical or Unsymmetrical) | 10 - 600 (3.0 - 182.9) | 10 - 20 (3.0 - 6.1) | 20 - 30 (6.1 - 9.1) | Gabled | Straight or tapered | Tapered beam | Bypass | 0.25:12 (1:48) | 12:12 (1:1) |
| Lean-To | 15 - 60 (4.6 - 18.3) | 10 - 22 (3.0 - 6.7) | 20 - 30 (6.1 - 9.1) | Lean to | Tapered | Tapered | Bypass | 0.5:12 (1:24) | 4:12 (1:3) |
| Single Slope | 20 - 60 (6.1 - 18.3) | 10 - 20 (3.0 - 6.1) | 20 - 30 (6.1 - 9.1) | Single slope | Straight or tapered | Straight or tapered | Bypass | 0.5:12 (1:24) | 0.5:12 (1:24) |
| METALLIC BUILDING COMPANY; DIVISION OF NCI BUILDING SYSTEMS, L.P. | | | | | | | | | |
| Clear Span | 20 - 120 (6.1 - 36.6) | 10 - 25 (3.0 - 7.6) | 20, 25 (6.1, 7.6) | Gabled | Tapered | Tapered | Flush or bypass | 1:12 (1:12) | N/A |
| High Span | 20 - 120 (6.1 - 36.6) | 10 - 25 (3.0 - 7.6) | 20, 25 (6.1, 7.6) | Gabled | Tapered | Tapered | Flush or bypass | 4:12 (1:3) | N/A |
| Single Slope Straight | 20 - 60 (6.1 - 18.3) | 10 - 20 (3.0 - 6.1) | 20, 25 (6.1, 7.6) | Single slope | Tapered | Straight | Flush or bypass | 1:12 (1:12) | N/A |
| Single Slope Tapered | 20 - 60 (6.1 - 18.3) | 10 - 20 (3.0 - 6.1) | 20, 25 (6.1, 7.6) | Single slope | Tapered | Tapered | Flush or bypass | 1:12 (1:12) | N/A |
| SPIRKO MANUFACTURING | | | | | | | | | |
| Frame | 30 - 200 (9.1 - 61.0) | 10 - 47 (3.0 - 14.3) | 15 - 30 (4.6 - 9.1) | Gabled, single slope, or lean to | Straight or tapered | Straight or tapered | Flush or bypass | 0.25:12 (1:48) | 8:12 (1:1.5) |
| STAR BUILDING SYSTEMS; AN NCI COMPANY | | | | | | | | | |
| SRHI | 30 - 350 (9.1 - 106.7) | 10 - 90 (3.0 - 27.4) | 20 - 36 (6.1 - 11.0) | Gabled | Tapered | Tapered | Bypass | 3:12 (1:4) | 12:12 (1:1) |
| SRLO | 30 - 300 (9.1 - 91.4) | 10 - 90 (3.0 - 27.4) | 20 - 36 (6.1 - 11.0) | Gabled | Tapered | Tapered | Flush or bypass | 0.5:12 (1:24) | 2:12 (1:6) |
| SSB | 16 - 120 (4.6 - 30.5) | 8 - 80 (2.4 - 24.4) | 20 - 36 (6.1 - 11.0) | Single slope | Straight | Straight | Flush or bypass | 0.5:12 (1:24) | 6:12 (1:2) |
| STB | 16 - 120 (4.6 - 30.5) | 8 - 80 (2.4 - 24.4) | 20 - 36 (6.1 - 11.0) | Gabled | Straight | Tapered beam | Flush or bypass | 0.5:12 (1:24) | 6:12 (1:2) |
| SWE | 16 - 80 (4.6 - 24.4) | 8 - 40 (2.4 - 12.2) | 20 - 36 (6.1 - 11.0) | Lean to | Straight | Tapered | Flush or bypass | 0.5:12 (1:24) | 0.5:12 (1:24) |
| USA, INC. | | | | | | | | | |
| LT | 15 - 60 (4.6 - 18.3) | 10.3 - 20 (3.1 - 6.1) | 20, 25 (6.1, 7.6) | Lean to | Straight | Straight or tapered | Flush | 1:12 (1:12) | 1:12 (1:12) |
| RF | 20 - 150 (6.1 - 45.7) | 10 - 25 (3.0 - 7.6) | 20, 25 (6.1, 7.6) | Gabled | Straight or tapered | Straight or tapered | Bypass | 1:12 (1:12) | 4:12 (1:3) |
| SC | 20 - 60 (6.1 - 18.3) | 10 - 20 (3.0 - 6.1) | 20, 25 (6.1, 7.6) | Gabled | Straight | Straight or tapered | Flush | 1:12 (1:12) | 1:12 (1:12) |
| SCSS | 20 - 70 (6.1 - 21.3) | 10 - 20 (3.0 - 6.1) | 20, 25 (6.1, 7.6) | Single slope | Straight | Straight or tapered | Flush | 1:12 (1:12) | 1:12 (1:12) |
| VP BUILDINGS; A UNITED DOMINION COMPANY | | | | | | | | | |
| Continuous Truss (CT) | Any | Any | Up to 60+ (Up to 18.3+) | Gabled | Straight | Straight | Flush, inset, or outset | 0.25:15 (1:60) | - |
| Rigid Frame (RF) | 30 - 300 | Up to 80 | Up to 40 | Gabled | Straight or | Straight or | Flush, inset, or | 0.25:12 | 6:12 |

| METAL BUILDING SYSTEMS - STRUCTURAL SYSTEMS (NOTE 1) | | | | | | | | | |
|---|---|---|--------------------------------------|---------------------------|------------------------|---|----------------------------|--|--|
| MANUFACTURER/ MODEL | TYPICAL BLDG. WIDTH FEET (M) | TYPICAL EAVE HEIGHT FEET (M) | BAY SPACINGS FEET (M) | CONFIG. | COLUMN TYPE | RAFTER TYPE | GIRT TYPE | MIN. SLOPE INCHES (RATIO) | MAX. SLOPE INCHES (RATIO) |
| | (9.1 - 91.4) | (Up to 24.4) | (Up to 12.2) | | tapered | tapered | outset | (1:48) | (1:2) |
| Truss Beam (TB) | Up to 120+ (Up to 36.6+) | Any | Up to 40 (Up to 12.2) | Gabled | Straight or tapered | Straight or tapered beam (open web) | Flush, inset, or outset | 1.5:12 (1:8) | 1.5:12 (1:8) |
| Unibeam (UB) | Up to 50 (Up to 15.2) | Up to 30 (Up to 9.1) | Up to 40 (Up to 12.2) | Gabled or single slope | Straight | Tapered beam | Flush, inset, or outset | 0.25:12 (1:48) | 3:12 (1:4) |
| Unibeam Lean-To (UBL) | Up to 50 (Up to 15.2) | Up to 30 (Up to 9.1) | Up to 40 (Up to 12.2) | Lean to | Straight | Tapered | Flush, inset or outset | 0.25:12 (1:48) | 3:12 (1:4) |
| WHIRLWIND BUILDING SYSTEMS | | | | | | | | | |
| LT | Varies | Varies | 18 - 30 (5.5 - 9.1) | Lean to | Straight | Straight or tapered | Varies | Varies | Varies |
| SSRF | Varies | 10 - 40 (3.0 - 12.2) | 20 - 30 (6.1 - 9.1) | Single slope | Straight or tapered | Tapered | Flush or inset | 0.5:12 (1:24) | 5:12 (1:2.4) |
| WRF | Varies | 10 - 40 (3.0 - 12.2) | 20 - 30 (6.1 - 9.1) | Gabled | Tapered | Tapered | Flush or inset | 0.5:12 (1:24) | 5:12 (1:2.4) |
| WTB | Varies | 10 - 18 (3.0 - 5.4) | 20 - 25 (6.1 - 7.6) | Gabled | Straight | Tapered | Flush | 1:12 (1:12) | 3:12 (1:4) |
| <p>Legend: N/A Not available</p> <p>Note: 1. Structural systems with interior columns are not included.</p> | | | | | | | | | |