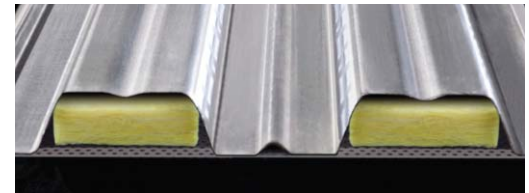
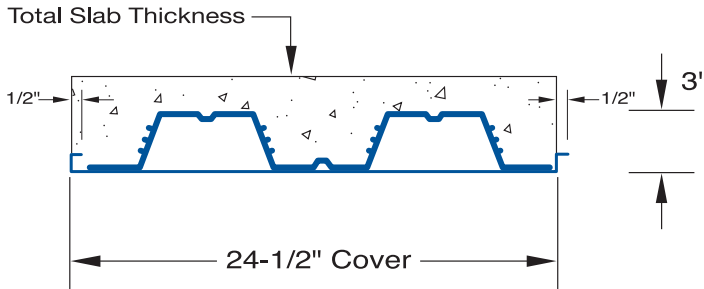


Type 3" composite cellular deck is utilized in exposed ceiling areas where a flat bottom deck is desired for aesthetic purposes under a slab and the spans exceed the capability of type 2" composite cellular deck.



Type 3" Composite Cellular Acoustical Type Shown

Section Properties (Fy=40 ksi)

| Gage Top/Bot | Weight (psf) Galv | I _p (In ⁴) | I _n (In ⁴) | S _p (In ³) | S _n (In ³) |
|--------------|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| 20/20 | 3.65 | 1.417 | 1.296 | 0.639 | 0.604 |
| 20/18 | 4.15 | 1.532 | 1.532 | 0.723 | 0.654 |
| 18/20 | 4.15 | 1.734 | 1.466 | 0.865 | 0.78 |
| 18/18 | 4.72 | 1.891 | 1.891 | 0.886 | 0.826 |
| 18/16 | 5.28 | 2.02 | 2.02 | 0.905 | 0.903 |
| 16/18 | 5.24 | 2.246 | 2.246 | 1.097 | 1.01 |
| 16/16 | 6.55 | 2.405 | 2.405 | 1.121 | 1.087 |

Acoustical Data

| Absorption Coefficients | | | | | | NRC |
|-------------------------|-----|-----|------|------|------|------------|
| 125 | 250 | 500 | 1000 | 2000 | 4000 | |
| .45 | .62 | 1.1 | .98 | .78 | .65 | .85 |

- Section properties calculated in accordance with AISI specifications

Maximum Allowable Unshored Clear Spans

| Slab Depth | Gage | Weight PSF | NW Concrete 145 PCF | | |
|------------|-------|------------|---------------------|---------|---------|
| | | | 1 Span | 2 Span | 3 Span |
| 5.5" | 20/20 | 58 | 9'-3" | 11'-1" | 11'-6" |
| | 20/18 | 58 | 9'-11" | 11'-7" | 11'-11" |
| | 18/20 | 58 | 11'-0" | 12'-8" | 13'-1" |
| | 18/18 | 59 | 11'-1" | 12'-11" | 13'-4" |
| | 18/16 | 59 | 11'-2" | 13'-6" | 14'-0" |
| | 16/18 | 60 | 12'-5" | 14'-3" | 14'-8" |
| | 16/16 | 60 | 12'-6" | 14'-9" | 15'-3" |
| 6.0" | 20/20 | 64 | 8'-10" | 10'-9" | 11'-1" |
| | 20/18 | 64 | 9'-6" | 11'-2" | 11'-6" |
| | 18/20 | 64 | 10'-6" | 12'-2" | 12'-7" |
| | 18/18 | 65 | 10'-7" | 12'-6" | 12'-10" |
| | 18/16 | 65 | 10'-9" | 13'-0" | 13'-6" |
| | 16/18 | 66 | 11'-11" | 13'-9" | 14'-2" |
| | 16/16 | 66 | 12'-0" | 14'-3" | 14'-8" |
| 6.5" | 20/20 | 70 | 8'-6" | 10'-4" | 10'-9" |
| | 20/18 | 70 | 9'-1" | 10'-9" | 11'-2" |
| | 18/20 | 70 | 10'-1" | 11'-9" | 12'-2" |
| | 18/18 | 71 | 10'-2" | 12'-1" | 12'-6" |
| | 18/16 | 71 | 10'-4" | 12'-7" | 13'-0" |
| | 16/18 | 71 | 11'-6" | 13'-4" | 13'-9" |
| | 16/16 | 72 | 11'-7" | 13'-9" | 14'-3" |

| Slab Depth | Gage | Weight PSF | NW Concrete 145 PCF | | |
|------------|-------|------------|---------------------|---------|---------|
| | | | 1 Span | 2 Span | 3 Span |
| 7.0" | 20/20 | 76 | 8'-2" | 10'-0" | 10'-4" |
| | 20/18 | 76 | 8'-10" | 10'-5" | 10'-10" |
| | 18/20 | 76 | 9'-9" | 11'-5" | 11'-9" |
| | 18/18 | 77 | 9'-10" | 11'-8" | 12'-1" |
| | 18/16 | 77 | 10'-0" | 12'-2" | 12'-7" |
| | 16/18 | 77 | 11'-1" | 12'-11" | 13'-4" |
| | 16/16 | 78 | 11'-2" | 13'-4" | 13'-9" |
| 7.5" | 20/20 | 82 | 7'-11" | 9'-9" | 10'-1" |
| | 20/18 | 82 | 8'-6" | 10'-2" | 10'-6" |
| | 18/20 | 82 | 9'-5" | 11'-1" | 11'-5" |
| | 18/18 | 83 | 9'-7" | 11'-4" | 11'-9" |
| | 18/16 | 83 | 9'-8" | 11'-10" | 12'-3" |
| | 16/18 | 83 | 10'-9" | 12'-6" | 12'-11" |
| | 16/16 | 84 | 10'-10" | 12'-11" | 13'-4" |

For superimposed live load tables, see 3" Composite Floor Deck - page 12-13

