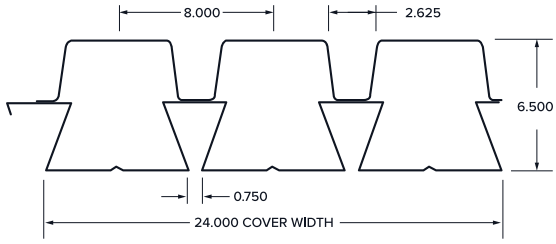
# 6.5" Super Versa-Dek® LS (6.5SVLS)

## PROPERTIES

| Gage | Thickness (in) | Cover (in) | Weight (psf) |
|---|---|---|---|
| 20/20 | 0.0358/0.0358 | 24 | 5.81 |
| 18/18 | 0.0474/0.0474 | | 7.70 |
| 16/16 | 0.0598/0.0598 | | 9.72 |




## ASD

## SECTION PROPERTIES

## DESIGN STRENGTHS

| Gage | $F_y$ (ksi) | $I_D$ 1 Span ($in^4$/ft) | $I_D$ 2+ Span ($in^4$/ft) | $I_p$ ($in^4$/ft) | $I_n$ ($in^4$/ft) | $S_p$ ($in^3$/ft) | $S_n$ ($in^3$/ft) | Mn,p/Ω (in-lb/ft) | Mn,n/Ω (in-lb/ft) | Vn/Ω (lb/ft) | *Rbe/Ω (lb/ft) | *Rbi/Ω (lb/ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20/20 | 40 | 8.183 | 8.655 | 7.320 | 8.028 | 1.581 | 2.068 | 37876 | 49536 | 3383 | 681 | 1437 |
| 18/18 | 40 | 11.605 | 12.048 | 10.811 | 11.476 | 2.489 | 2.993 | 59619 | 71684 | 5931 | 1151 | 2390 |
| 16/16 | 40 | 15.239 | 15.887 | 14.486 | 15.458 | 3.564 | 4.138 | 85367 | 99113 | 8289 | 1771 | 3638 |

**Notes:**
1. Section properties are calculated in accordance with the AISI S100-16.
2. Web crippling design strengths* are based on minimum bearing lengths of 2" for end bearing and 4" for interior bearing.

## ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

| Span Condition | Gage | Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf) Center to Center Span (ft - in) | | | | | | | | | SDI Max. Constr. Span (ctr / ctr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 15 - 0 | 16 - 0 | 17 - 0 | 18 - 0 | 20 - 0 | 22 - 0 | 24 - 0 | 26 - 0 | 28 - 0 | 30 - 0 | |
| Single | 20/20 | 91 / 159 | 85 / 131 | 80 / 109 | 76 / 92 | 63 / 67 | 52 / 50 | 44 / 39 | 37 / 31 | 32 / 24 | 28 / 20 | 39 - 11 |
| | 18/18 | 153 / 225 | 144 / 186 | 135 / 155 | 123 / 130 | 99 / 95 | 82 / 71 | 69 / 55 | 59 / 43 | 51 / 35 | 44 / 28 | 40 - 0 |
| | 16/16 | 236 / 296 | 221 / 244 | 197 / 203 | 176 / 171 | 142 / 125 | 118 / 94 | 99 / 72 | 84 / 57 | 73 / 46 | 63 / 37 | 40 - 0 |
| Double | Contact New Millennium for multiple span information | | | | | | | | | | | |
| Triple | | | | | | | | | | | | |

**Notes:**
3. Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
   - ANSI/SDI RD-2017 Standard for Steel Roof Deck
   - Minimum bearing lengths of 2" for end bearing and 4" for interior bearing. Check web crippling if minimums are not met.
4. Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
5. "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
6. See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

## MAXIMUM CANTILEVER SPANS

| Gage | $F_y$ (ksi) | Back-Span Condition | | |
|---|---|---|---|---|
| | | Single | Double | Triple |
| 20/20 | 40 | 6 - 11 | Contact New Millennium for multiple span information | |
| 18/18 | 40 | 8 - 5 | | |
| 16/16 | 40 | 9 - 9 | | |

**Notes:**
7. Maximum cantilever spans shown are based on the following criteria:
   - ANSI/SDI RD-2017 Standard for Steel Roof Deck
   - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
   - Bearing width at perimeter support assumed to be 4" minimum
   - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.

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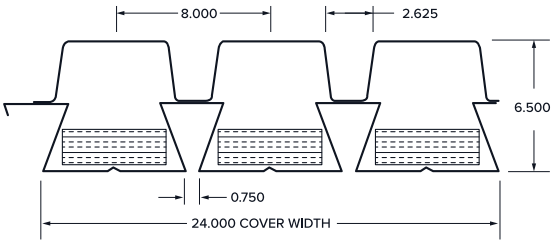
www.newmill.com/digital-tools

# 6.5" Super Versa-Dek® LS Acoustical (6.5SVLSA)

## PROPERTIES

| Gage | Thickness (in) | Cover (in) | Weight (psf) |
|---|---|---|---|
| 20/20 | 0.0358/0.0358 | 24 | 5.54 |
| 18/18 | 0.0474/0.0474 | | 7.35 |
| 16/16 | 0.0598/0.0598 | | 9.28 |




## ASD

## SECTION PROPERTIES

## DESIGN STRENGTHS

| Gage | $F_y$ (ksi) | $I_D$ 1 Span ($in^4$/ft) | $I_D$ 2+ Span ($in^4$/ft) | $I_p$ ($in^4$/ft) | $I_n$ ($in^4$/ft) | $S_p$ ($in^3$/ft) | $S_n$ ($in^3$/ft) | Mn,p/Ω (in-lb/ft) | Mn,n/Ω (in-lb/ft) | Vn/Ω (lb/ft) | *Rbe/Ω (lb/ft) | *Rbi/Ω (lb/ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20/20 | 40 | 7.618 | 8.518 | 6.856 | 8.206 | 1.552 | 2.105 | 37167 | 50423 | 3383 | 681 | 1437 |
| 18/18 | 40 | 10.787 | 11.785 | 10.090 | 11.586 | 2.435 | 3.056 | 58319 | 73206 | 5931 | 1151 | 2390 |
| 16/16 | 40 | 14.164 | 15.238 | 13.510 | 15.120 | 3.478 | 4.171 | 83315 | 99907 | 8289 | 1771 | 3638 |

**Notes:**
1. Section properties are calculated in accordance with the AISI S100-16.
2. Web crippling design strengths* are based on minimum bearing lengths of 2" for end bearing and 4" for interior bearing.

## ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

| Span Condition | Gage | Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf) Center to Center Span (ft - in) | | | | | | | | | SDI Max. Constr. Span (ctr / ctr) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 15 - 0 | 16 - 0 | 17 - 0 | 18 - 0 | 20 - 0 | 22 - 0 | 24 - 0 | 26 - 0 | 28 - 0 | 30 - 0 | |
| Single | 20/20 | 91 / 148 | 85 / 122 | 80 / 102 | 76 / 86 | 62 / 62 | 51 / 47 | 43 / 36 | 37 / 28 | 32 / 23 | 28 / 18 | 39 - 10 |
| | 18/18 | 153 / 210 | 144 / 173 | 135 / 144 | 120 / 121 | 97 / 88 | 80 / 66 | 67 / 51 | 58 / 40 | 50 / 32 | 43 / 26 | 40 - 0 |
| | 16/16 | 236 / 275 | 217 / 227 | 192 / 189 | 171 / 159 | 139 / 116 | 115 / 87 | 96 / 67 | 82 / 53 | 71 / 42 | 62 / 34 | 40 - 0 |
| Double | Contact New Millennium for multiple span information | | | | | | | | | | | |
| Triple | | | | | | | | | | | | |

**Notes:**
3. Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
   - ANSI/SDI RD-2017 Standard for Steel Roof Deck
   - Minimum bearing lengths of 2" for end bearing and 4" for interior bearing. Check web crippling if minimums are not met.
4. Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
5. "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
6. See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

## MAXIMUM CANTILEVER SPANS

| Gage | $F_y$ (ksi) | Back-Span Condition | | |
|---|---|---|---|---|
| | | Single | Double | Triple |
| 20/20 | 40 | 6 - 11 | Contact New Millennium for multiple span information | |
| 18/18 | 40 | 8 - 5 | | |
| 16/16 | 40 | 9 - 9 | | |

**Notes:**
7. Maximum cantilever spans shown are based on the following criteria:
   - ANSI/SDI RD-2017 Standard for Steel Roof Deck
   - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
   - Bearing width at perimeter support assumed to be 4" minimum
   - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.