Table 5. Fastener Spacing for a Southern Pine, Douglas Fir-Larch, or Hem-Fir Deck Ledger or Band or Rim Joist and a 2-inch Nominal Solid-Sawn Spruce-Pine-Fir Band Joist or LVL Rim Joist. 3,4,5,6,8 (Deck Live Load = 40 psf. Deck Dead Load = 10 psf.)

		Joist Span						
1	Rim Joist or Band Joist	6'-0" and less	6'-1" to 8'-0"	8'-1" to 10'-0"	10'-1" to 12'-0"	12'-1" to 14'-0"	14'-1" to 16'-0"	16'-1" to 18'-0"
Connection Details	On-Center Spacing of Fasteners							
½" diameter lag screw¹ with 15/32" maximum sheathing	1" LVL 1- ¹ / ₈ " LVL 1- ¹ / ₂ " Lumber	24" 28" 30"	18" 21" 23"	14" 16" 18"	12" 14" 15"	10" 12" 13"	9" 10" 11"	8" 9" 10"
½" diameter bolt with 15/32" maximum sheathing	1" LVL 1-1/8" LVL 1-1/2" Lumber	24" 28" 36"	18" 21" 36"	14" 16" 34"	12" 14" 29"	10" 12" 24"	9" 10" 21"	8" 9" 19"
1/2" diameter bolt with 15/ ₃₂ " maximum sheathing and 1/2" stacked washers ^{2,7}	1-½" Lumber	36"	36"	29"	24"	21"	18"	16"

- 1. The tip of the lag screw shall fully extend beyond the inside face of the band or rim joist.
- 2. The maximum gap between the face of the ledger board and face of the wall sheathing shall be ½".
- 3. Ledgers shall be flashed or caulked to prevent water from contacting the house band joist (see Figures 14 and 15).
- Lag screws and bolts shall be staggered per Figure 19.
- Deck ledgers shall be minimum 2x8 pressure-preservative-treated No.2 grade lumber, or other approved materials as established by standard engineering practice.
- 6. When solid-sawn pressure-preservative-treated deck ledgers are attached to engineered wood products (minimum 1" thick wood structural panel band joist or structural composite lumber including laminated veneer lumber), the ledger attachment shall be designed in accordance with accepted engineering practice. Tabulated values based on 300 lbs and 350 lbs for 1" and 1-1/8" LVL rim joist, respectively.
- 7. Wood structural panel sheathing, gypsum board sheathing, or foam sheathing shall be permitted between the band or rim joist and ledger. Stacked washers are permitted in combination with wood structural panel sheathing, but are not permitted in combination with gypsum board or foam sheathing. The maximum distance between the face of the ledger board and the face of the band joist shall be 1".
- Fastener spacing also applies to Southern Pine, Douglas Fir-Larch, and Hem-Fir band or rim joists.