



Figure 1

DRY SERVICE CONDITION

GRK RSS 5/16"Ø x 3-1/2"				Deck Joist Span					
				ft.	6	8	10	12	14
				m	1.83	2.44	3.05	3.66	4.27
Live or Snow Load (kPa)	Wood Species / Type	Specific Gravity	Screw Shear Strength (kN)	Screw Spacing					
1.9	SPF	0.42	1.43	in.	16	12	10	8	6
				mm	406	305	254	203	152
	D.fir-L	0.49	1.67	in.	20	14	12	10	8
				mm	508	356	305	254	203
	LVL/LSL	0.50	1.70	in.	20	14	12	10	8
				mm	508	356	305	254	203
2.6	SPF	0.42	1.43	in.	12	10	8	6	4
				mm	305	254	203	152	102
	D.fir-L	0.49	1.67	in.	14	10	8	6	6
				mm	356	254	203	152	152
	LVL/LSL	0.50	1.70	in.	16	12	8	8	6
				mm	406	305	203	203	152
4.8	SPF	0.42	1.43	in.	6	4	4	3	3
				mm	152	102	102	76	76
	D.fir-L	0.49	1.67	in.	8	6	4	4	---
				mm	203	152	102	102	---
	LVL/LSL	0.50	1.70	in.	8	6	4	4	4
				mm	203	152	102	102	102

WET SERVICE CONDITION

GRK RSS 5/16"Ø x 3-1/2"				Deck Joist Span					
				ft.	6	8	10	12	14
				m	1.83	2.44	3.05	3.66	4.27
Live or Snow Load (kPa)	Wood Species / Type	Specific Gravity	Screw Shear Strength (kN)	Screw Spacing					
1.9	SPF	0.42	0.96	in.	10	8	6	4	4
				mm	254	203	152	102	102
	D.fir-L	0.49	1.12	in.	12	10	8	6	4
				mm	305	254	203	152	102
2.6	SPF	0.42	0.96	in.	8	6	4	4	3
				mm	203	152	102	102	76
	D.fir-L	0.49	1.12	in.	10	6	6	4	4
				mm	254	152	152	102	101.6
4.8	SPF	0.42	0.96	in.	4	2	---	---	---
				mm	102	51	---	---	---
	D.fir-L	0.49	1.12	in.	6	4	---	---	---
				mm	152	102	---	---	---

General Notes:

1. Screw spacing are based on the shear capacity in accordance to Clause 12.11 "Wood Screws" CSA 086-14. The shear capacity are based on a wood ledger (nominal 2" SPF or D.Fir-L or 1 3/4" LVL or LSL) screwed to a 1 1/2" thick wood rim joist with a wood-based sheathing material in between. No building cladding material such as wood siding, stucco, or brick veneer shall be installed between the ledger, wood-based sheathing, and the rim joist.
2. "----" indicates the screw cannot be used for the application due to the required spacing being less than the minimum spacing per Clause 12.11.2 CSA 086-14.
3. A dead load of 0.5 kPa (10 psf) for the self-weight of the decking, finishes and framing members has been accounted for in determining the screw spacing. This bulletin should not be referenced for deck ledgers under dead load greater than 0.5 kPa (10 psf). Superimposed dead loads such as planters and hot tubs have not been accounted for. A professional engineer should be consulted for heavier deck loads.
4. Linear interpolation is not permitted to attain the screw spacing for live or snow load in between those listed in the design tables.
5. Deck ledger and rim joist shall be No.2 grade lumber or better with moisture content between 10% and 19% at the time of installation, or LVL or LSL in dry conditions. LVL or LSL ledgers should not be used in wet conditions.
6. Rim joist shall have full bearing for its thickness and shall bear on a sill plate and restrained from eccentric loading from the deck ledger. Sill plate is to be either preservative-treated or protected from moisture using a damp-proof course.
7. Should the species of the ledger and rim joists differ, the screw spacing shall be based on the species with the lowest specific gravity (G).
8. Un-incised preservative treatment of the deck ledger for SPF and D.Fir-L wood species have been accounted for in determining the screw spacing. SPF and D.Fir-L deck ledger should be treated and designed by a professional engineer as required by the building code of jurisdiction.
9. The building code of jurisdiction shall govern over the guidelines contained in these bulletins.
10. Size and spacing of the deck ledger screws are based on gravity loads only. Lateral loads such as wind and seismic have not been accounted for.