## Approximate LRV% for Wood-X Coloured Wood Oil

LRV is a measurement of absorbed and reflected visible light wavelengths using a specialised instrument (a spectrophotometer) to measure a solid opaque colour

The measurement result/value refers to how light or dark a solid paint colour will look on a scale of 0 (black) to 100 (white). The higher the LRV number is, the lighter the colour and the lower the LRV number is the darker the colour.

A stain or coloured oil is not a solid colour, it is semi-transparent in nature and when a stain coating/coloured oil is measured using a spectrophotometer the measurement is a combination of reflected and absorbed light and differentiation reflected light of the stain/oil colour and the substrate, hence a measurement of LRV semi-transparent colour values cannot be accurately achieved. The same principle also applies to other type measurements such as TSR (total solar reflectance) values, i.e. heat reflection of near infra-red radiation on substrates/surfaces.

Authorities, such as District Councils, seek LRV values in produced Building Guides to encourage the use of colours with low reflectance to make buildings appear unobtrusive within the landscape (so they don't stand out). For paints and powder coatings (i.e. solid colours) this is fine, however for coloured semi-transparent stain or oils, and again as above, this is just not feasible.

In an effort to provide an estimate of LRV stain/oil colours we look to match the depth of the semi-transparent stain or oil colour to a solid paint colour, and then use the LRV of the solid colour as an approximation to achieve the LRV.

Below is the Wood-X Oil colour tone, applied to light-mid coloured Western Red Cedar substrate with approximate LRV value based on an approximation to a Resene solid colour.

Wood-X Colour	Approx LRV%	Resene solid colour LRV Ref
Aspiring	61	Alpaca
Avalanche	77	Anglaise
Beaumont	10	Chocolate Lounge
Benmore	20	Matakana
Boulder Grey	21	Slate Brown
Buller	12	Mocha
Buscot	7	Black Magic
Cascade	12	Mocha
Cook Strait	10	Coast
Craigeburn	31	Blue Smoke
Damper	68	Swirl
Double Cone	12	Brown Derby
Dray	12	Mocha
Endeavour	53	Serene
Flagstaff	12	Spinnaker
Flint	8	Milk Chocolate
Forge	15	Saddle

Foundry	7	Monkey
Glacier Peak	62	Bone
Gold Rush	25	Dark Buff
Haast	8	Espresso
Hessian	56	Calico
Hicks Mist	16	Spice
High Country	29	Pendragon
Kauri Gum	29	Pendragon
Main Sail	69	Pearl Bush
Malt	10	Redwood
McKenna	8	Espresso
Minaret	11	Avalanche
Mount Honey	38	Kalgoorie Sands
Oxen	22	Lone Ranger
Peat	6	Rustic Red
Pioneer	44	Quarter Nullarbor
Saddle Hill	9	Forest Green
Settler	7	Desperado
Shale	30	Otter
Stockade	8	Milk Chocolate
Takaka Hill	25	Yucca
Tasman	16	Spice
Tor	22	Lone Ranger
Torlesse	14	Cumin
Traverse	21	Chelsea
Treacle	11	Lusty
Veil	27	Monsoon

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