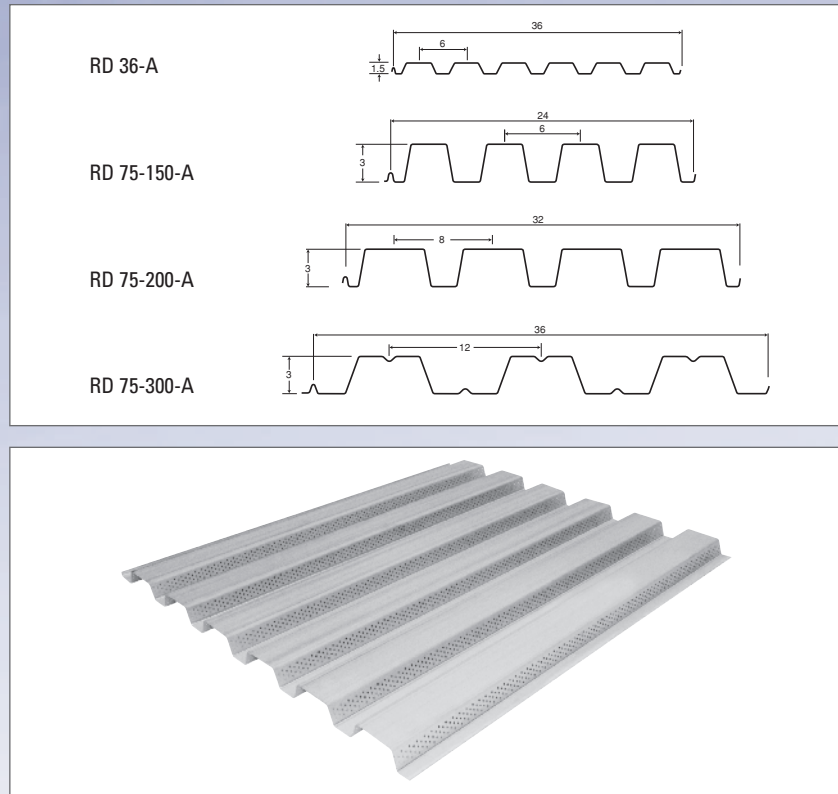


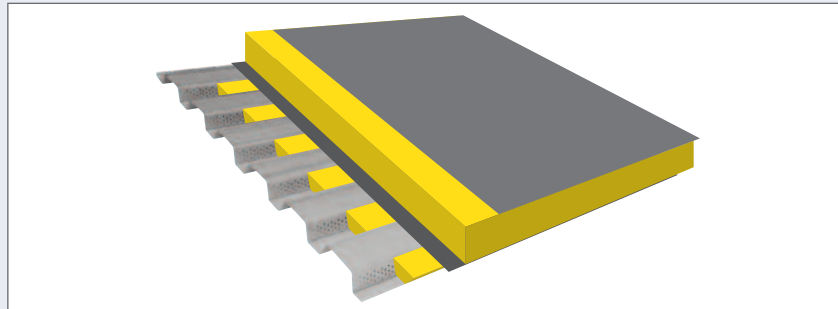
Acoustic Deck

Acoustic Deck Profiles

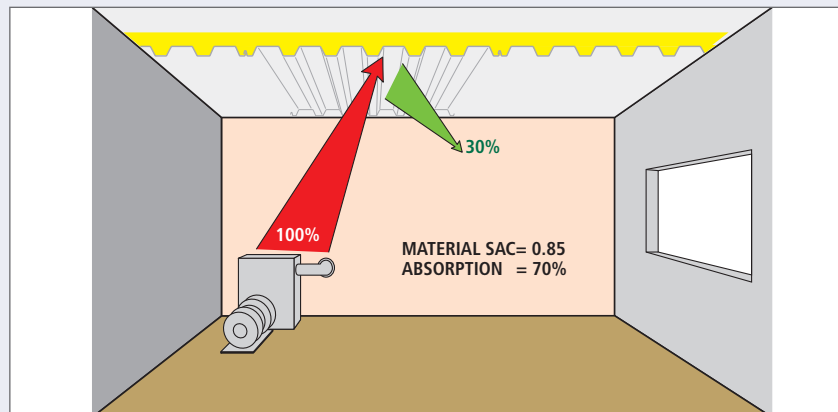


Application of Acoustic Deck

Typical roof section with Acoustic Insulation:



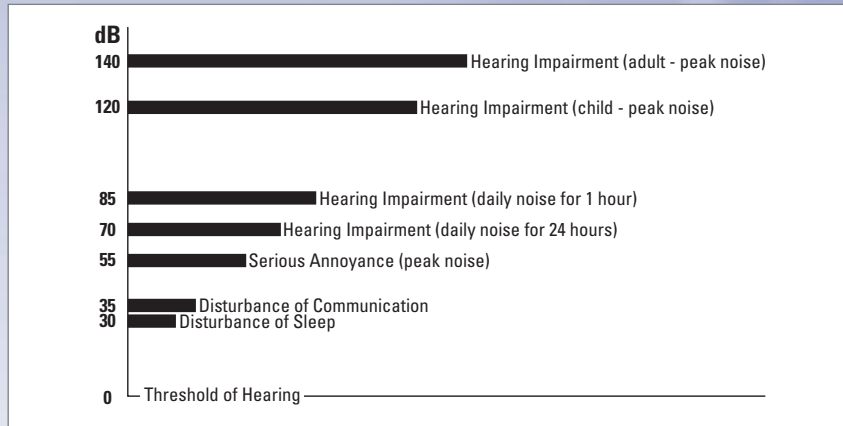
Noise reduction is achieved by a combination of the perforations in the web portion of the deck and the acoustic batt insulation in the flutes of the deck.



Acoustic Deck

The effect of High Sound levels

The long and short term effects of exposure to high sound levels can be seen from the accompanying chart. It should be noted that a 10 dB difference in loudness is heard as a doubling (or halving) of this loudness.



Sound Absorption Coefficients for Acoustic Steel Deck

The values shown below are typical for most Canadian-manufactured acoustically treated roof deck products.

Deck Depth	Frequency in Hertz						NRC
	125	250	500	1000	2000	4000	
1 1/2"	0.13	0.55	0.79	1.01	0.53	0.25	0.70
3"	0.13	0.53	0.93	0.92	0.45	0.30	0.70

Strength Reduction in Acoustic Steel Deck

Perforating the web does have an effect on the inherent strength and rigidity of the deck. This can vary from 5% to 10%, based on a number of factors such as perforation size and frequency, thickness and grade of steel, etc.

Agway Metals Inc. should be consulted for specific details.

Deck Depth	Strength Reduction %	Stiffness Reduction %
1 1/2" (38 mm)	5	none
3" (76 mm)	10	5

