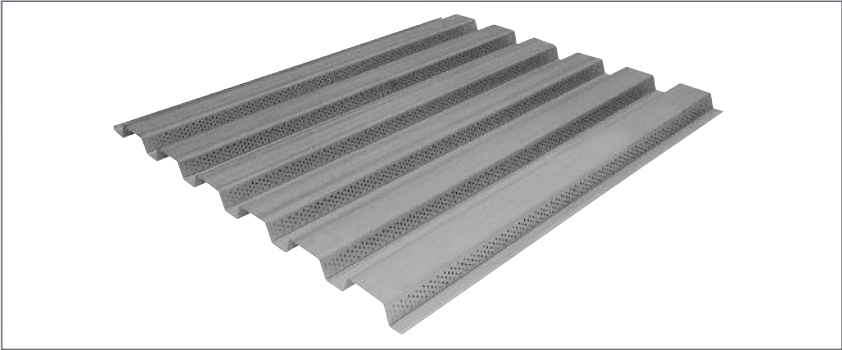
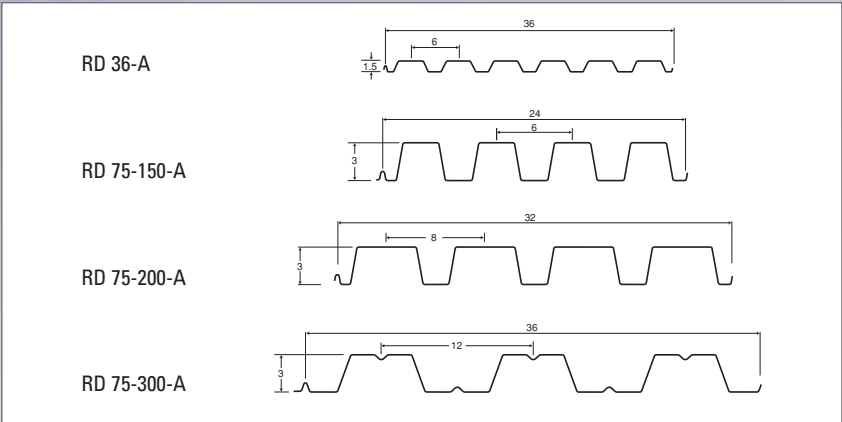


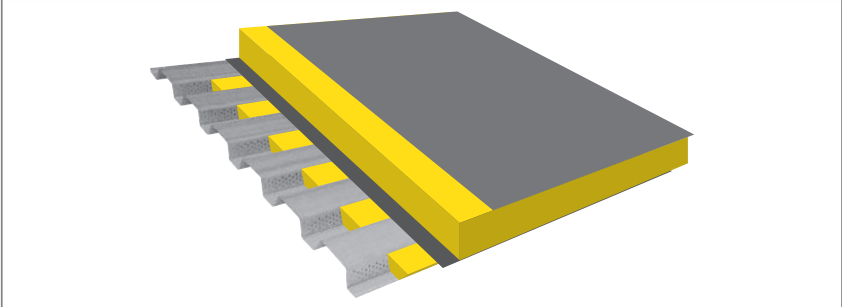
# Acoustic Deck

## Acoustic Deck Profiles

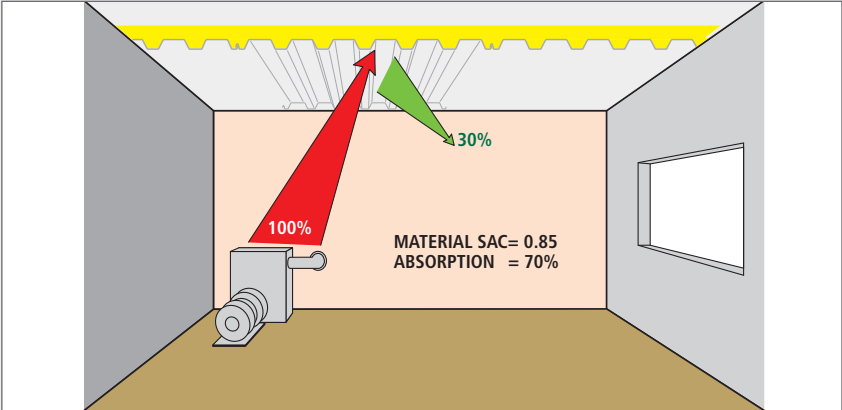


## Application of Acoustic Deck

Typical roof section with Acoustic Insulation:



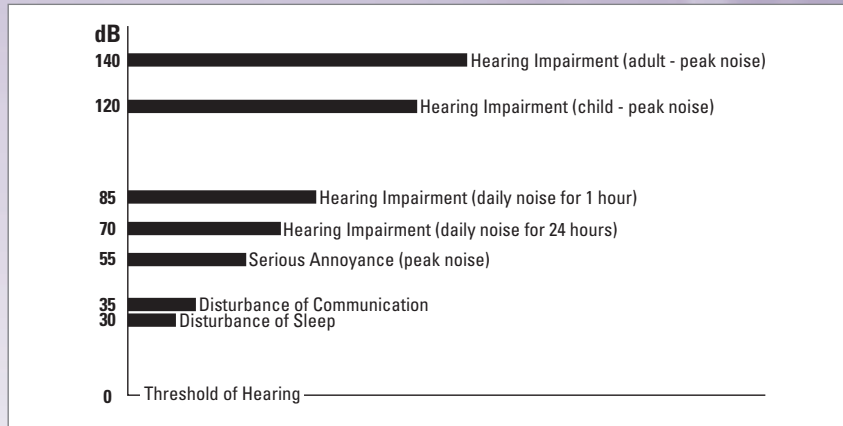
Noise reduction is achieved by a combination of the perforations in the web portion of the deck and the acoustic batt insulation in the flutes of the deck.



# 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

