Belgotex

Aqua Elite Underlay

Acoustic Predictions: Impact Insulation Class (IIC)

8mm Laminate on Belgotex Aqua Elite

Suspended Ceiling	Cavity Insulation	150mm Concrete	200mm Concrete
		IIC	IIC
None	None	50	54
100mm cavity with 1 x 13mm plasterboard	None	61	63
	75mm Glasswool	63	64
200mm cavity with 1 x 13mm plasterboard	None	61	64
	75mm Glasswool	64	65
200mm cavity with 2 x 13mm plasterboard	None	65	67
	75mm Glasswool	65	68

12mm Laminate on Belgotex Aqua Elite

Suspended Ceiling	Cavity Insulation	150mm Concrete	200mm Concrete
		IIC	IIC
None	None	48	52
100mm cavity with 1 x 13mm plasterboard	None	59	63
	75mm Glasswool	62	64
200mm cavity with 1 x 13mm plasterboard	None	60	64
	75mm Glasswool	62	65
200mm cavity with 2 x 13mm plasterboard	None	63	67
	75mm Glasswool	64	68

9.2mm Hardened Timber on Belgotex Aqua Elite

Suspended Ceiling	Cavity Insulation	150mm Concrete	200mm Concrete
		IIC	IIC
None	None	49	53
100mm cavity with 1 x 13mm plasterboard	None	60	63
	75mm Glasswool	62	64
200mm cavity with 1 x 13mm plasterboard	None	61	64
	75mm Glasswool	63	65
200mm cavity with 2 x 13mm plasterboard	None	64	67
	75mm Glasswool	65	68

Belgotex

Aqua Elite Underlay

Acoustic Predictions: Impact Insulation Class (IIC)

10mm Hardened Timber on Belgotex Aqua Elite

Suspended Ceiling	Cavity Insulation	150mm Concrete	200mm Concrete
		IIC	IIC
None	None	50	54
100mm cavity with 1 x 13mm plasterboard	None	61	64
	75mm Glasswool	63	65
200mm cavity with 1 x 13mm plasterboard	None	62	65
	75mm Glasswool	64	66
200mm cavity with 2 x 13mm plasterboard	None	65	68
	75mm Glasswool	66	69

11.3mm Hardened Timber on Belgotex Aqua Elite

Suspended Ceiling	Cavity Insulation	150mm Concrete	200mm Concrete
		IIC	IIC
None	None	48	53
100mm cavity with 1 x 13mm plasterboard	None	60	64
	75mm Glasswool	63	65
200mm cavity with 1 x 13mm plasterboard	None	61	65
	75mm Glasswool	63	66
200mm cavity with 2 x 13mm plasterboard	None	64	68
	75mm Glasswool	65	69

Fails NZ Building Code requirement
Meets NZ Building Code requirement (within in-situ tolerance)
Exceeds NZ Building Code requirement

Note:

The acoustic predictions above were prepared by an independent acoustic consultant using the Insul Computer Program and are based on test data from acoustic testing conducted at the University of Auckland – Acoustics Testing Service. These predictions rely on the following assumptions:

- The suspended concrete slab and plasterboard ceiling are perfectly sealed and performing at their optimal acoustical level
- The hard flooring is installed correctly, with no bridging of the Aqua Elite underlay

While the prediction results provide a useful indication of expected performance, these should not be interpreted as a definitive outcome. Actual acoustic performance can only be confirmed through on-site testing.

If you need clarification, please contact your Belgotex Business Development Manager (BDM) or email us at info@belgotex.co.nz.