



12 October 2023

Client: Materialised

Address: 19 Heath Road, Blakehurst NSW 2221

Attention: Sarah Liu (<u>Sarah.Liu@materialised.com</u>)

Fabric Sample: Tweedle Dee

Description:	Predicted statistical (diffuse-field) sound absorption modelled using transfer matrix method and measured fabric parameters.
Modelled System:	The parameters used for 100% fullness were 90 mm between crests, a minimum distance from the trough of the fabric and the wall is 60 mm, while the maximum distance from the wall to the furthest peak of the fold is 140 mm.
Modelling Method:	Our calculation method models the theoretical sound absorption coefficients of a multi-panel system comprising a series of elements with acoustical mass and resistance for normal and oblique incidence. The results are then converted to diffuse-field incidence using commonly accepted algorithms.
Fabric Mass:	0.328 kg/m² (328 gsm)
Fabric Flow Resistance:	366 Rayls ± 14 Rayls calculated at 7.9 – 39.3 cm³/s
Calculated NRC:	0.74

Measurements and modelling undertaken by:

Camille Hanrahan-Tan, Acoustic Consultant

Approved by:

Glenn Leembruggen, Principal

Glenn heembrugger



