

## ACOUSTICAL PERFORMANCE

Sound absorption can be achieved by the addition of backing ceiling panels with acoustical fabric or pad.

### ACOUSTICAL BAFFLE TEST RESULTS

- 2" x 6" Perforated Baffle Beam – Spacing 6" o.c.
- 2" x 8" Perforated Baffle Beam – Spacing 8" o.c.
- 2" x 10" Perforated Baffle Beam – Spacing 10" o.c.
- 2" x 12" Perforated Baffle Beam – Spacing 12" o.c.
- 2" x 15" Perforated Baffle Beam – Spacing 15" o.c.

PERFORATION PATTERN	ACOUSTICAL INFILL	2" x 6"		2" x 8"		2" x 10"		2" x 12"		2" x 15"	
		APPARENT		APPARENT		APPARENT		APPARENT		APPARENT	
		NRC	SAA	NRC	SAA	NRC	SAA	NRC	SAA	NRC	SAA
106	Non-Woven plus 1.5", 1.5 pcf fiberglass	1.00	1.00	*	*	*	*	*	*	*	*
106	Non-Woven plus 1.5", 1.5 pcf black poly encapsulated fiberglass	1.00	0.95	*	*	*	*	*	*	*	*
106	Non-Woven plus 1.5", 3.0 pcf black poly encapsulated fiberglass	1.00	0.96	*	*	*	*	*	*	*	*
106	Non-Woven	0.60	0.59	*	*	*	*	*	*	*	*
115	Non-Woven plus 1.5", 1.5 pcf black poly encapsulated fiberglass	1.10	1.09	1.10	1.11	1.15	1.16	1.15	1.16	1.20	1.21
115	1.5", 1.5 pcf black poly encapsulated fiberglass	1.05	1.05	1.05	1.04	1.10	1.11	1.10	1.09	1.15	1.16
115	Non-Woven plus 1.5", 3.0 pcf black poly encapsulated fiberglass	1.00	1.00	*	*	*	*	*	*	*	*
115	Non-Woven	0.70	0.69	0.60	0.61	0.75	0.73	0.75	0.74	0.75	0.75
119	Non-Woven plus 1.5", 1.5 pcf black poly encapsulated fiberglass	1.00	0.98	1.05	1.07	1.15	1.12	1.10	1.10	1.15	1.15
119	1.5", 1.5 pcf black poly encapsulated fiberglass	1.00	0.94	1.05	1.03	1.10	1.08	1.05	1.04	1.10	1.11
119	Non-Woven plus 1.5", 3.0 pcf black poly encapsulated fiberglass	0.90	0.94	*	*	*	*	*	*	*	*
119	Non-Woven	0.60	0.58	0.60	0.60	0.75	0.73	0.75	0.76	0.75	0.73

Tests conducted in accordance with ASTM C423 and E795, with mounting type "J".  
Test reports available upon request.

\* Not tested

### Appendix D to ASTM C423 Sound Absorption Test

Non-standard calculation of equivalent NRC Rating and Absorption Coefficients from spaced absorbers

At this time, ASTM C423 does not provide a standard method for determining absorption coefficients of spaced object absorbers. Tests of a set of sound absorbing objects spaced apart from each other will yield higher absorption rates than a specimen joined together as a single patch (A-Mount or E-Mount). For this reason it is unfair to provide NRC or absorption coefficient ratings for specimens that consist of a spaced set of absorbers. Despite this, the architectural industry has expressed great demand for a simple "single number" rating for these treatments. Likewise, acoustical consultants desire equivalent absorption coefficient data for use in acoustical modeling software. The following is an attempt to appease these demands until ASTM develops a standard method for calculation. Several alternate non-standard calculation methods are provided. Riverbank Acoustical Laboratories prefers method 1. Rating titles for these methods are prepended with the word "Apparent". These rating names and their associated acronyms are provided by RAL and shall not be misconstrued as originating from any current standard.



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