S R L **Sound Research Laboratories**

INVESTORS IN PEOPLE

Holbrook House, Little Waldingfield,
Sudbury, Suffolk CO10 0TH
Tel: (01787) 247595
e-mail: srl@srltsl.com

UKAS TESTING 0444

Test Certificate No. 8176

Contract: C/22710

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Confidential

See SRL report C/22710/T01 for full details

The Laboratory Measurement of Random Incidence Sound Absorption to BS EN ISO 354:2003

Client: Armstrong
Test Date: 18/01/2014

Empty Room:	**Temperature:**	17.1	°C	**Humidity:**	64	%RH	**Pressure:**	985 mbar
Room with Sample:	**Temperature:**	16.9	°C	**Humidity:**	55	%RH	**Pressure:**	985 mbar

Sample Description: Ultima+ OP 600x600x20mm

Mounting Method: E- 200
Sample Area: 12.96 m2
Chamber Volume: 300 m3

	Test 4			
Freq Hz	T1 sec	T2 sec	Absorp Coeff	Practical Absorp Coeff #
*50**	*5.55*	*4.41*	*0.17*	
*63**	*4.47*	*3.05*	*0.39*	*n/a*
*80**	*6.25*	*3.88*	*0.37*	
100	7.58	4.39	0.36	
125	7.77	4.51	0.35	0.40
160	6.86	3.41	0.55	
200	6.93	2.78	0.81	
250	7.58	2.99	0.76	0.80
315	7.12	2.68	0.87	
400	6.59	2.46	0.96	
500	5.56	2.25	0.99	1.00
630	5.12	2.14	1.02	
800	5.50	2.36	0.91	
1000	5.99	2.39	0.95	0.95
1250	5.70	2.21	1.04	
1600	5.19	2.08	1.08	
2000	4.77	1.96	1.11	1.00
2500	4.35	1.91	1.07	
3150	3.71	1.72	1.12	
4000	3.00	1.49	1.18	1.00
5000	2.46	1.30	1.23	
*6300**	*1.82*	*1.05*	*1.30*	
*8000**	*1.37*	*0.84*	*1.41*	*n/a*
*10000**	*1.00*	*0.67*	*1.38*	

α_w 1.00

Class A

Calculated to EN ISO 11654:1997

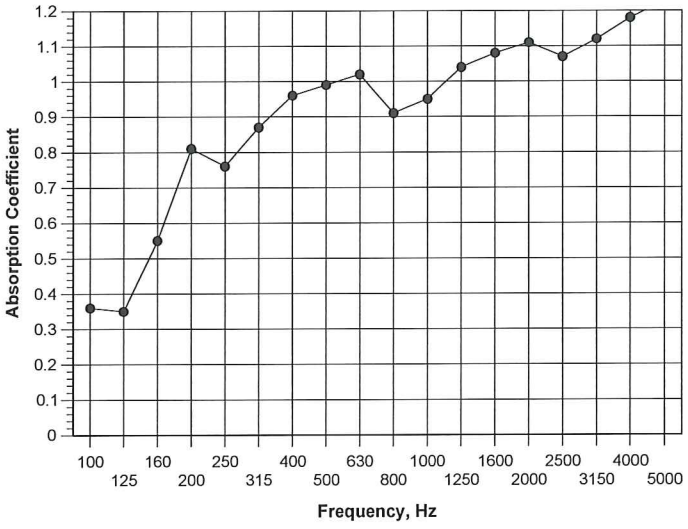
NRC 0.95

Calculated to ASTM C 423-01

** Denotes frequencies outside the range covered by BS EN ISO 354:2003*

T1, empty room reverberation time
T2, room reverberation time with sample

Sound Absorption Coefficient



Practical absorption coefficient, BS EN ISO 11654:1997

v4.3

Quality Manager

Deputy Technical Manager