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Test Certificate

FiTechnic International
Doha
Doha
QATAR

Report Number Q800093 : Issue 1
Page 1 of 1
Order Number Quotation No.: QQ20324
Date Tested 07/01/18
Date Reported 15/01/18

Attn: Mr. Afnas Chiralakkandi

Item - P.M.I Testing for Clamp

Specification - Client Requirement

P.M.I. - Client Requirement

	Position	Details	Comments
001:Lab XRF Analysis	N/A	Clamp	See Below
Item 001: Material Match: SS316 Elements: %Mo = 2.05 %Ni = 9.66 %Mn = 1.45 %Cr = 16.59			

Certficate Comments

---------- End of Text ----------

Tested by Exova - Qatar

.....
For and on authority of Exova
Exova (Qatar) L.L.C.

Witnessed by .....
Client Representative

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SUNIL PULAGAM
Sr. Metallurgist

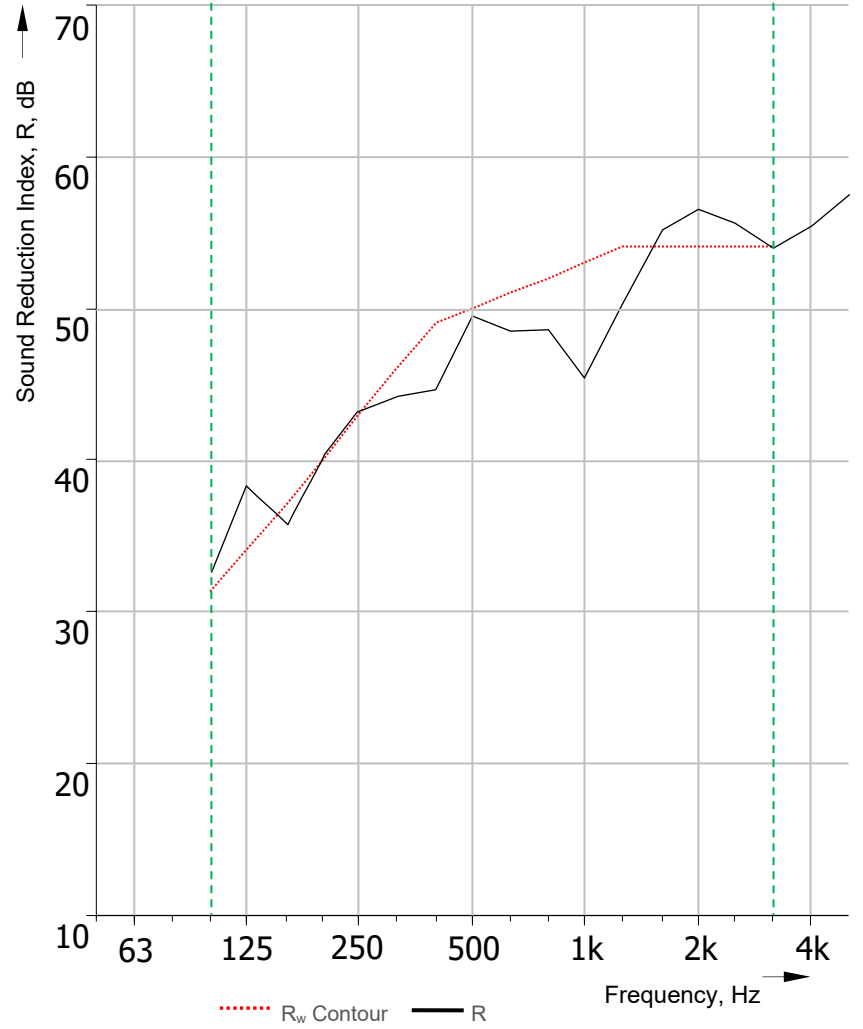
Sample: Double glazed, partition wall system, incorporating fixed, vision glass panels.
Glass: 15.52 mm thick, laminated glass (8 mm thick, tempered + 1.52 mm PVB interlayer + 6 mm thick, tempered) on the outer layer, 15.52 mm thick, laminated glass (8 mm thick, tempered + 1.52 mm PVB interlayer + 6 mm thick, tempered) on the inner layer with a 60 mm air gap.
See drawing no. Zittire-100_15.52mm in Appendix A for further details.

Sample Size: 2.2 m high x 2.00 m wide. Sample Area, S 4.4 m^2
Source Room Volume: 180.0 m^3
Receiving Room Volume: 202.0 m^3

Test Conditions:	Temp. (±0.7 °C)	RH (±3.0%)	Atm (±0.5 mbar)
Source Room:	21.0	30	1010
Receiving Room:	20.8	30	1010

Al Futtaim Element Materials Technology Dubai L.L.C
Facade Testing & Advisory Services Division

Frequency f Hz	R 1/3 Octave dB
50	-
63	-
80	-
100	32.8
125	38.1
160	35.8
200	40.5
250	43.1
315	44.4
400	44.8
500	49.6
630	48.6
800	48.7
1000	45.6
1250	50.1
1600	55.2
2000	56.7
2500	55.7
3150	54.1
4000	55.5
5000	57.6



Rating according to BS EN ISO 717-1:2020, over the frequency range 100 Hz – 3150 Hz:

Rw (C;Ctr) = 50 (-1; -4) dB $C_{100\text{-}5000}$ = -0 dB $C_{tr100\text{-}5000}$ = -4 dB

Sum of unfavourable deviations = 24.3 dB

Evaluation based on laboratory measurement

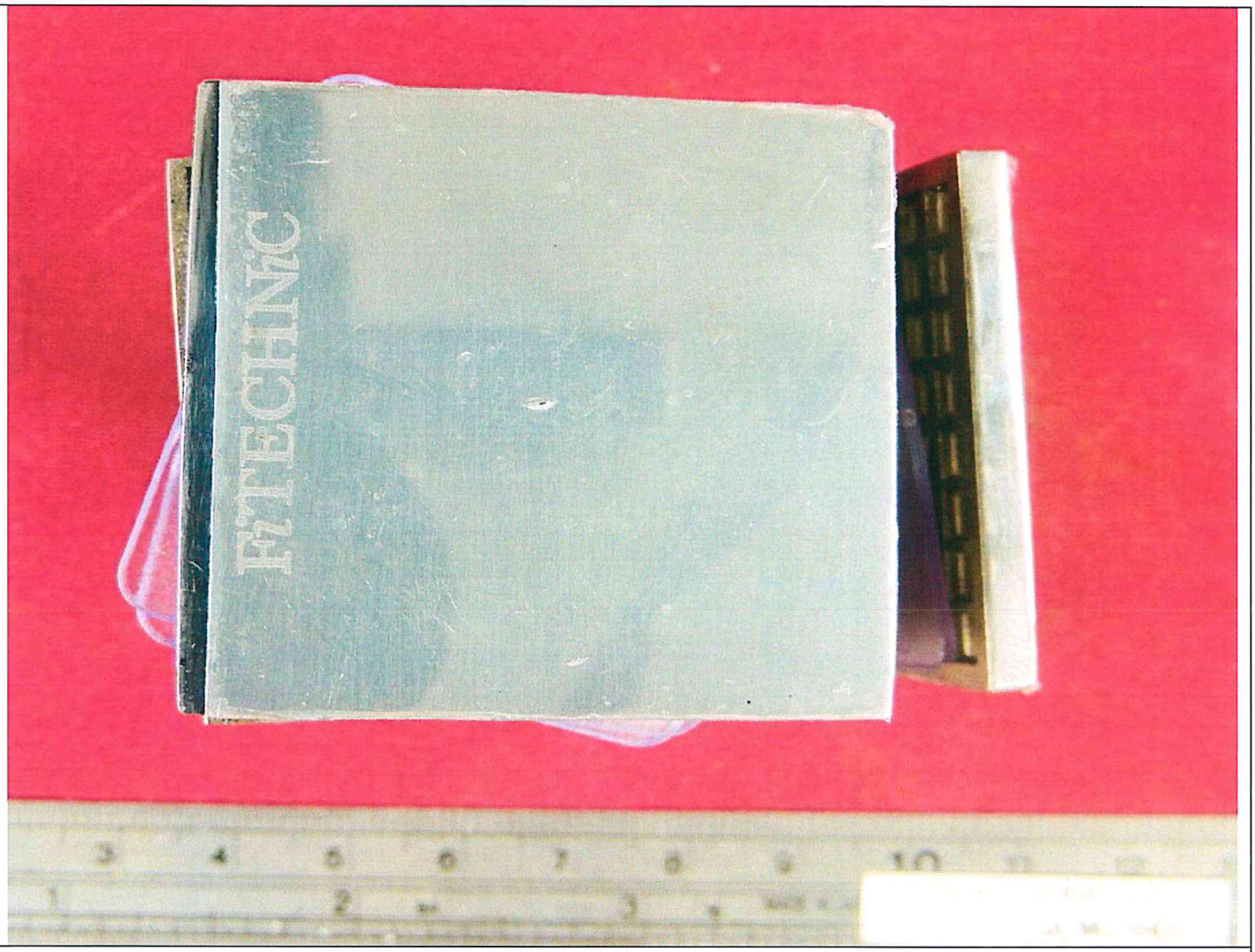


Figure 1: Photograph showing as-received condition of Clamp sample for PMI testing.

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Report Number Q800094 : Issue 1
Page 1 of 1
Order Number Quotation No.: QQ20324
Date Tested 07/01/18
Date Reported 15/01/18

Attn: Mr. Afnas Chiralakkandi

Item - P.M.I Testing for Pipe-Glass Connector

Specification - Client Requirement

P.M.I. - Client Requirement

	Position	Details	Comments
001:Lab XRF Analysis	N/A	Pipe-Glass Connector	See Below
Item 001: Material Match: SS316 Elements: %Mo = 2.14 %Ni = 9.23 %Mn = 0.48 %Cr = 15.83			

Certficate Comments

---------- End of Text ----------

Tested by Exova - Qatar

For and on authority of Exova
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Witnessed by .....
Client Representative

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SUNIL PULAGAM
Sr. Metallurgist

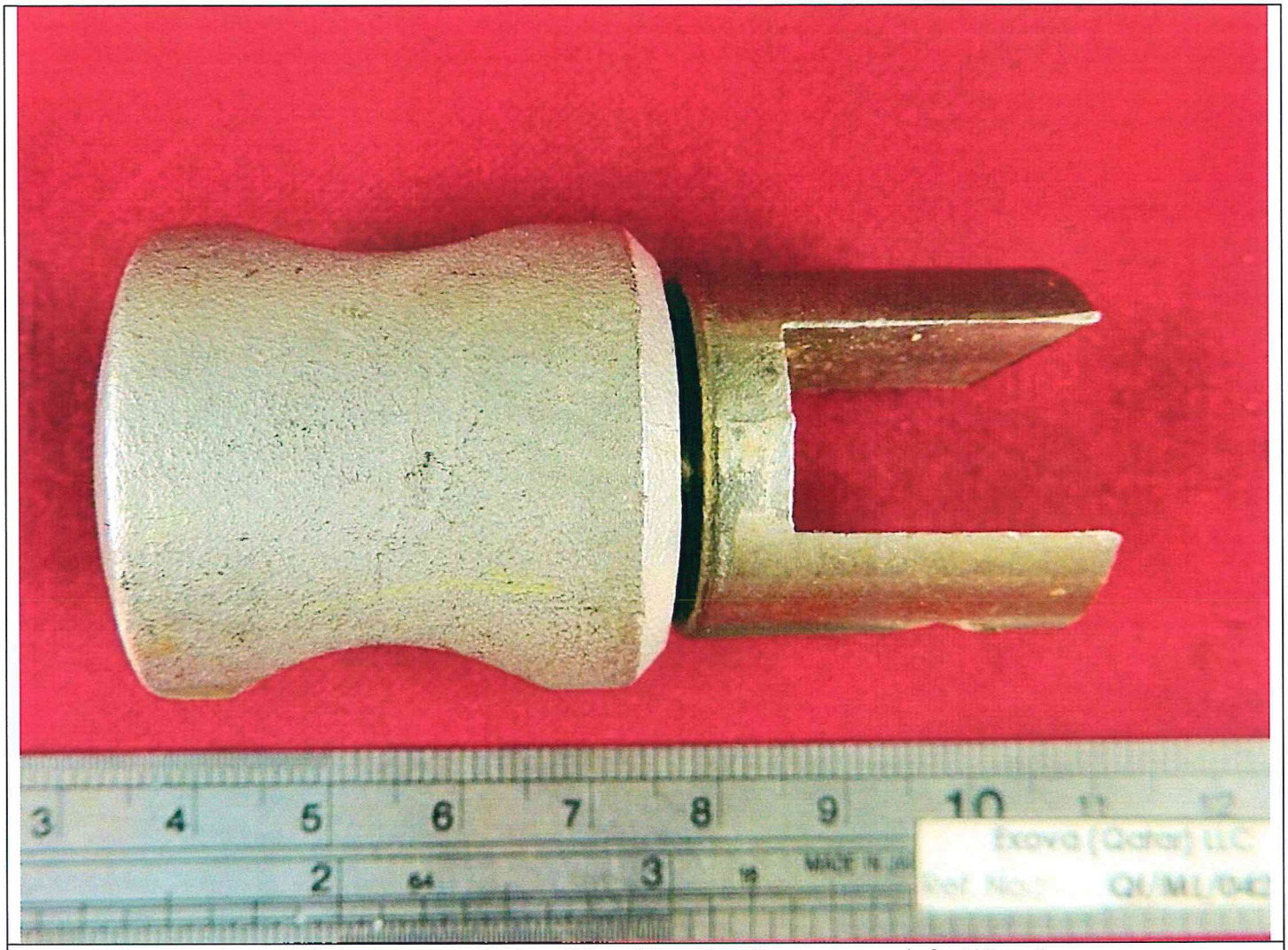

Figure 1: Photograph showing as-received condition of Pipe-Glass Connector sample for PMI testing.

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Report Number Q800096 : Issue 1
Page 1 of 1
Order Number Quotation No.: QQ20324
Date Tested 07/01/18
Date Reported 15/01/18

Attn: Mr. Afnas Chiralakkandi

Item - P.M.I Testing for Pipe-Valve Connector

Specification - Client Requirement

P.M.I. - Client Requirement

	Position	Details	Comments
001:Lab XRF Analysis	N/A	Pipe-Wall Connector	See Below

Item 001: Material Match: SS316
Elements:
%Mo = 2.24 %Ni = 9.67 %Mn = 0.70 %Cr = 17.02

Certficate Comments

---------- End of Text ----------

Tested by Exova - Qatar

Witnessed by .....
Client Representative

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.....
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Sr. Metallurgist

Figure 1: Photograph showing as-received condition of Pipe-Valve Connector for PMI testing.

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Report Number Q800035 : Issue 1
Page 1 of 1
Order Number Quotation No.: QQ20324
Date Tested 07/01/18
Date Reported 15/01/18

Attn: Mr. Afnas Chiralakkandi

Item - P.M.I Testing for Stainless Steel Components

Specification - Client Requirement

P.M.I. - Client Requirement

	Position	Details	Comments
001:Lab XRF Analysis	N/A	Shower Hinge	See Below

Item 001: Material Match: SS316
Elements:
%Mo = 1.98 %Ni = 10.17 %Mn = 1.18 %Cr = 16.93

Certficate Comments

---------- End of Text ----------

Tested by Exova - Qatar

Witnessed by .....
Client Representative

.....
For and on authority of Exova
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Sr. Metallurgist

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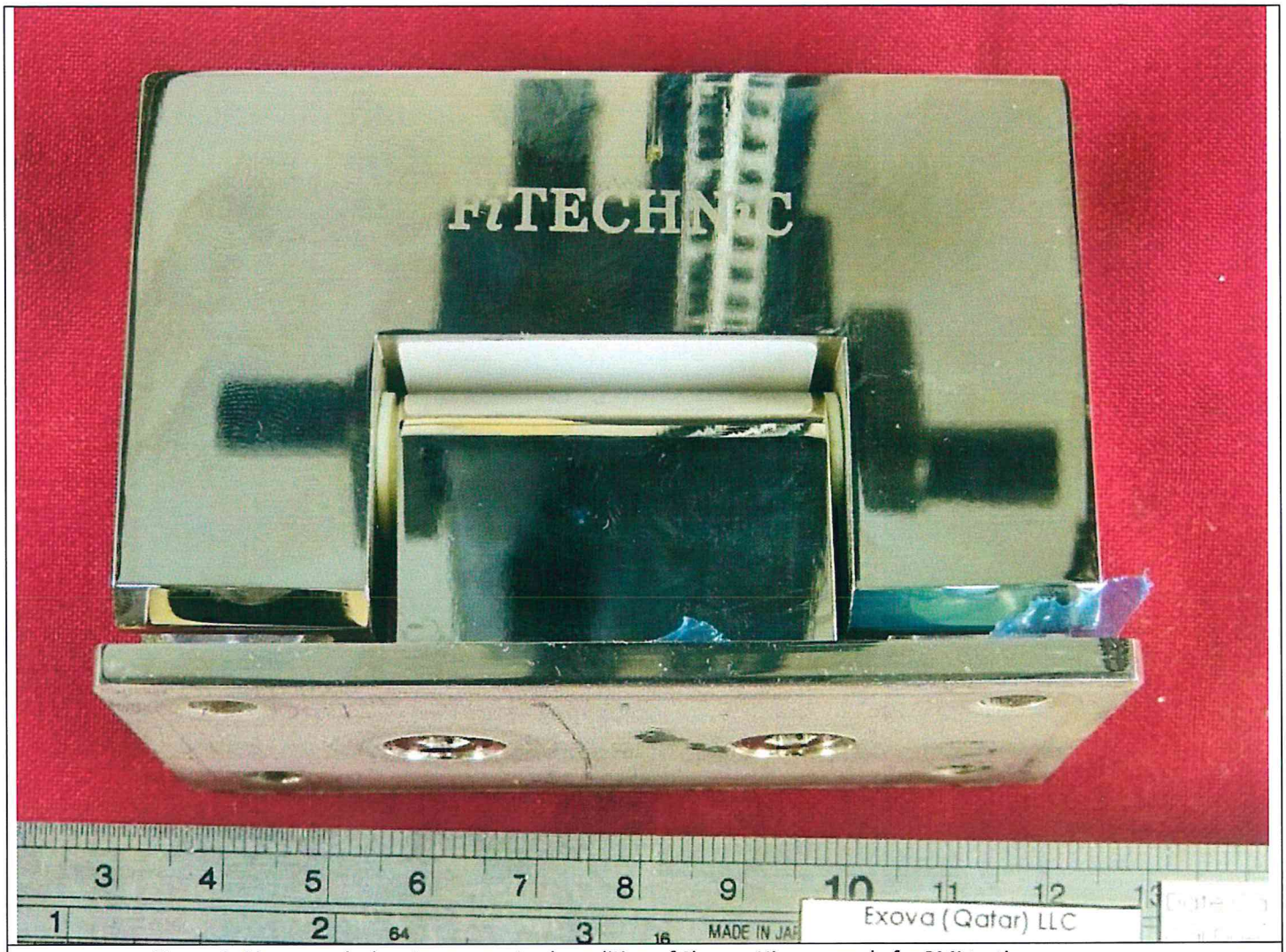

Figure 1: Photograph showing as-received condition of Shower Hinge sample for PMI testing.

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Report Number Q800095 : Issue 1
Page 1 of 1
Order Number Quotation No.: QQ20324
Date Tested 07/01/18
Date Reported 15/01/18

Attn: Mr. Afnas Chiralakkandi

Item - P.M.I Testing for Handle

Specification - Client Requirement

P.M.I. - Client Requirement

	Position	Details	Comments
001:Lab XRF Analysis	N/A	Handle	See Below

Item 001: Material Match: SS316
Elements:
%Mo = 2.18 %Ni = 10.59 %Mn = 1.11 %Cr = 16.87

Certficate Comments

---------- End of Text ----------

Tested by Exova - Qatar

.....

For and on authority of Exova
Exova (Qatar) L.L.C.

Witnessed by .....
Client Representative

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SUNIL PULAGAM
Sr. Metallurgist

Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements In Accordance With BS EN ISO 10140-2:2021

Client: FITECHNIC International Date of Test: 4 December 2024

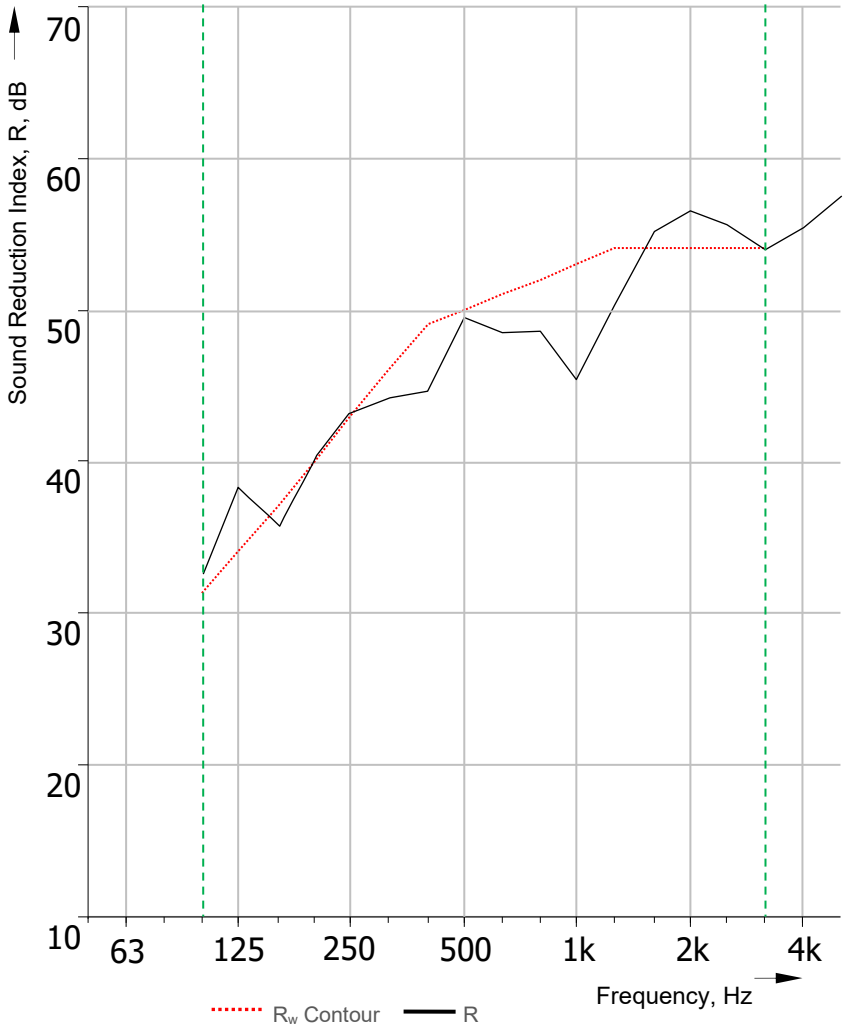
Sample: Double glazed, partition wall system, incorporating fixed, vision glass panels.
Glass: 15.52 mm thick, laminated glass (8 mm thick, tempered + 1.52 mm PVB interlayer + 6 mm thick, tempered) on the outer layer, 15.52 mm thick, laminated glass (8 mm thick, tempered + 1.52 mm PVB interlayer + 6 mm thick, tempered) on the inner layer with a 60 mm air gap.
See drawing no. Zittire-100_15.52mm in Appendix A for further details.

Sample Size: 2.2 m high x 2.00 m wide. Sample Area, S 4.4 m^2
Source Room Volume: 180.0 m^3
Receiving Room Volume: 202.0 m^3

Test Conditions:	Temp. (±0.7 °C)	RH (±3.0%)	Atm (±0.5 mbar)
Source Room:	21.0	30	1010
Receiving Room:	20.8	30	1010

Al Futtaim Element Materials Technology Dubai L.L.C
Facade Testing & Advisory Services Division

Frequency f Hz	R 1/3 Octave dB
50	-
63	-
80	-
100	32.8
125	38.1
160	35.8
200	40.5
250	43.1
315	44.4
400	44.8
500	49.6
630	48.6
800	48.7
1000	45.6
1250	50.1
1600	55.2
2000	56.7
2500	55.7
3150	54.1
4000	55.5
5000	57.6



Rating according to BS EN ISO 717-1:2020, over the frequency range 100 Hz – 3150 Hz:

Rw (C;Ctr) = 50 (-1; -4) dB $C_{100\text{-}5000}$ = -0 dB $C_{tr100\text{-}5000}$ = -4 dB

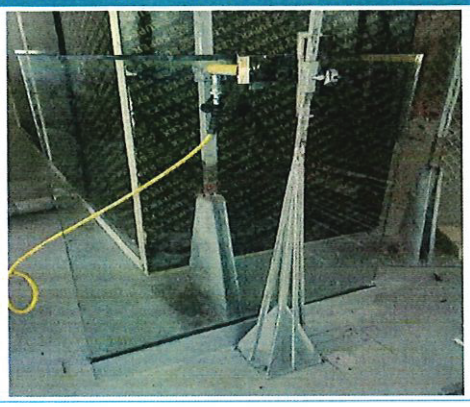
Sum of unfavourable deviations = 24.3 dB

Evaluation based on laboratory measurement

AFE Sample Reference: DA4779D Name of Test Institute: Al Futtaim Element MTD L.L.C

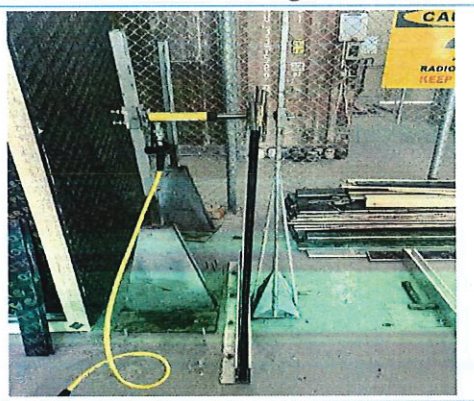
Tested by: Muhammed Ali Irshad

4. PICTURES TAKEN DURING THE TEST "Concentrated Load Test"

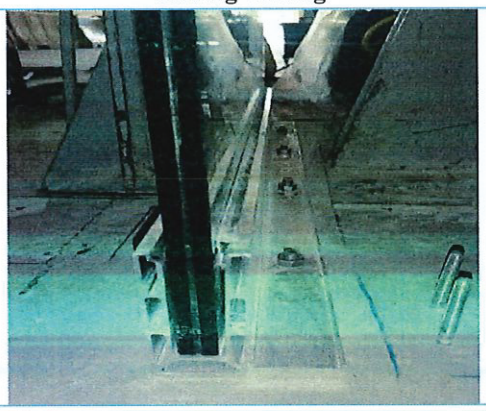


Prior testing

During Testing



Imposed Load



No sign of damage and the profile was fixed properly to the floor

5. LOAD TESTING RESULTS

Phase	Distributed Load Test		Concentrated Load Test	
	Deflection	Load		
Height Where the Load Was Applied	110		110	
Imposed Load	4.0 kN		0.89 kN	
Initial Value	0		0	
Deflection value at First Increment	25 mm	12.31bar	0.25	2.5 bar
Deflection value at Second Increment	>25 mm	24.62 bar	5.45	5 bar
Deflection value at Third Increment		36.93 bar	15.04	7.5 bar
Deflection value at Fourth Increment		49.15 bar	20.90	10 bar
Deflection value at Full Load		60	25 mm	12.31 bar
Final Result	Pass		Pass	
Conclusion	Pass			