

Acoustic+

PROPRIETARY ITEM CODE: ACOU+

PRODUCT DESCRIPTION

An ultra-high-performance noise wall system developed over a number of years by Acoustic Engineers and Industry Professionals making it the *best-in-class* solution in the attenuation of air-borne noise.



Con-form
GROUP
Making it *Easy*

SPECIFICATION WORDING

- ▶ System shall be Con-form Group Acoustic+, proprietary code: ACOU+.

APPLICATIONS

Perfect for a wide range of noise-reduction applications:

- ▶ Large format stores – Shopping Centres - Supermarkets
- ▶ Large condenser screening,
- ▶ General architectural screening,
- ▶ Compressor enclosures and screening,
- ▶ Other mechanical plant equipment enclosures.

FEATURES AND ADVANTAGES

- ▶ Acoustic+ is Australia's leading external acoustic wall system in performance, design and value.
- ▶ Con-form Group's most effective system at reducing sound energy due to its three phase operation (absorbing - reflecting - absorbing).
- ▶ Non-invasive - perfect to retrofit.
- ▶ Can be fitted directly to existing metal deck roofs.
- ▶ Structural components provide highly durable, long-term stability and performance.
- ▶ Built to withstand all weather conditions.
- ▶ Absorptive barrier is moisture resistant, UV resistant and fire retardant.
- ▶ Easy assembly, design reduces the need for additional structural requirements.
- ▶ System remains flexible during and after project design, allowing for changes late into the construction stage.



TECHNICAL DATA

- ▶ **Acoustic Performance:** Available in five surface density options to suite your site-specific needs:

- Option A = 7 kg/m²
- Option B = 13kg/m²
- Option C = 19kg/m²
- Option D = 25kg/m²
- Option E = 31kg/m²

All options have a noise absorptive surface as a standard.

- ▶ **NRC** (Noise Reduction Coefficient) = 0.75
- ▶ **Standard Heights:** 1200mm, 1600mm, 2000mm, & 2400mm
- ▶ **Fire Resistance:** When tested in accordance with AS1530.3 (1999), "Early Fire Hazard Properties of Materials", PSB exhibit the following characteristics:
 - Ignitability Index: 0
 - Spread of Flame Index: 0
 - Heat Evolved: 0
 - Smoke Developed Index: 0 – 3
- ▶ **Environmental & Health Benefits:**
 - Recycled Fibre Content: 80% minimum.
 - Volatile Organic Compounds (VOC's): No harmful VOC's.
 - Formaldehyde Content: Nil
 - Phenol Content: Nil
 - Ammonia Content: Nil
 - Ozone Depleting Potential (ODP): Nil
 - Chloride Content
 - Total Recyclable Content: 100%



- ▶ **Moisture Resistance:** Exposure to an atmosphere of 50 °C and 95% relative humidity for 4 days results in less than 0.2% by vol moisture absorption.
- ▶ **Maximum Service Temperature:** The maximum temperature to which Acoustic+ should be exposed in service is 150 °C.
- ▶ PET (polyethylene terephthalate) is made from 80% recycled materials and unaffected by moisture making it ideal for external applications.

CERTIFICATIONS

- ▶ **Australian Standards:** AS/NZS1170.1, AS1170.2, AS V1170.4, AS1657 & AS1664.1 & Relevant Clauses of the Building Code of Australia
- ▶ **Wind Loads:** Wind loads in accordance with AS/NZS 1170.2, and based on the following parameters: VR,500 = as listed below; and Ms = 1.00, Mt = 1.00, Md, =1.00, and Mz,cat.

Con-form Group products have been certified for wind regions A, B and C

V500 = 45m/s - Region A - Tc 2.5
V500 = 57m/s - Region B - Tc 2.5
V500 = 66m/s - Region C - Tc 2.5



A B C

ACOUSTIC WALL SYSTEM WITH
ULTRA NOISE REDUCTION BY
REFLECTION & ABSORPTION.

Acoustic+

WARRANTY

- ▶ All components backed by a 25 year warranty.



MAINTENANCE

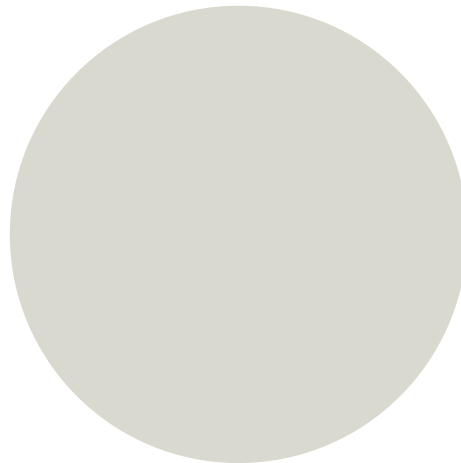
- ▶ Visual inspection for any damage or loose fittings is recommended annually. Report any damage or loose fixings to asset manager or building owner for correction.

No certified maintenance is required that effects lifespan or performance of product.

COLOUR OPTIONS

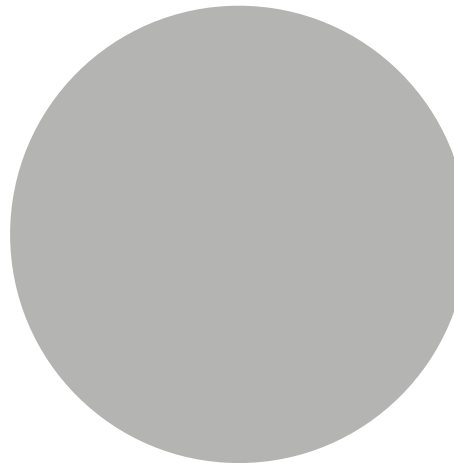
Available in three popular Colorbond colour choices.

Colorbond[®]



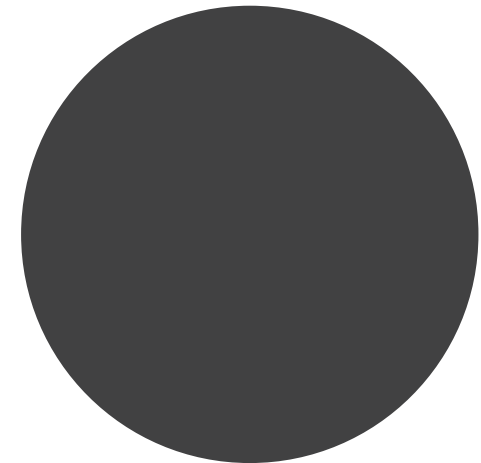
SURF MIST

(Off-white)



SHALE GREY

(Gull-grey)



MONUMENT

(Gun metal grey)

100% total recyclable content.





Product Codes: Option A, Option B, Option C, Option D, Option E

Product Description: Outdoor acoustic barrier consisting of:
 0.55 custom sheet metal
 0.8mm galvanised steel
 25mm polyester absorber

Date of Report: 24th May 2022

Prepared for: Con-form Group

Calculations by: Michael Phillips Acoustics

Report by: Michael Phillips Acoustics

Notes: Theoretical predictions have been conducted utilising INSUL, STRUTT, in house testing, general available information and experience in acoustical product performances, research and development. Further, theoretical predictions are not a substitute for actual test data and results can vary, as can testing conducted in different laboratories.

Sincerely

Michael Phillips

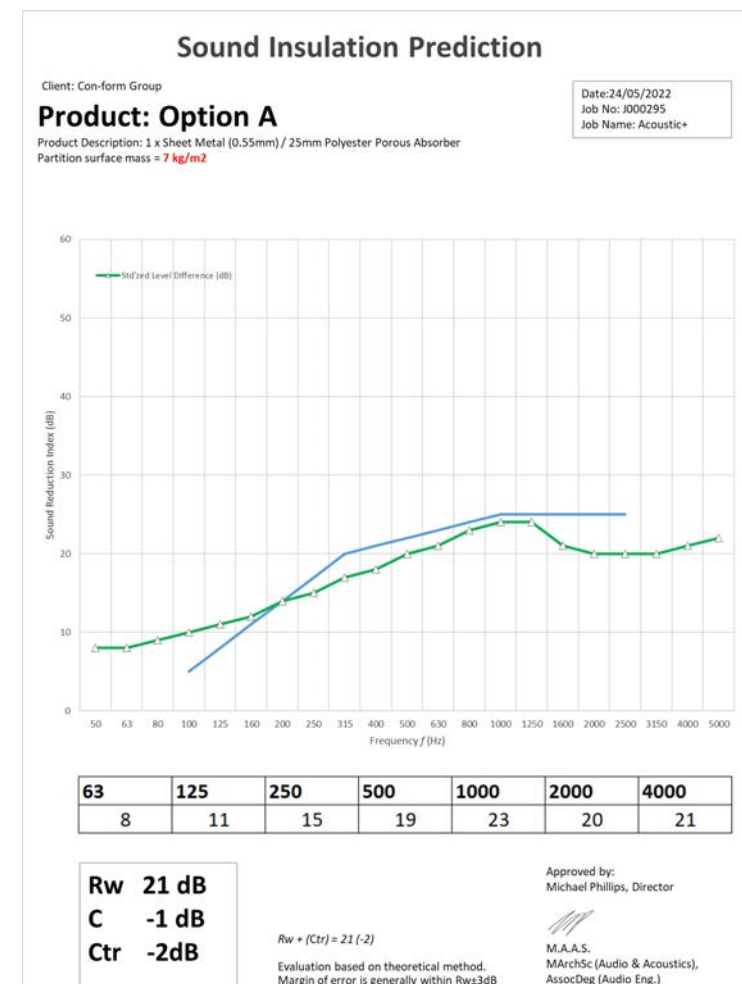
Acoustic Engineering Director

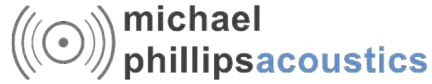
M.A.A.S.

MArchSc (Audio & Acoustics), AssocDeg (Audio Eng.) P 0413 904 997

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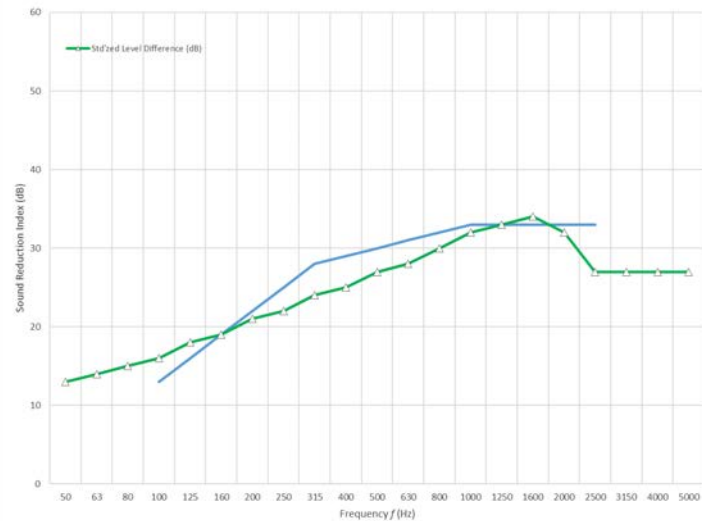
Sound Insulation Prediction

Client: Con-form Group

Product: Option B

Product Description: 1 x Sheet Metal (0.55mm) / 0.8mm Steel / 25mm Polyester Porous Absorber
Partition surface mass = **13 kg/m²**

Date: 24/05/2022
Job No: J000295
Job Name: Acoustic+



| 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|----|-----|-----|-----|------|------|------|
| 14 | 18 | 22 | 27 | 31 | 30 | 27 |

Rw 29 dB
C -1 dB
Ctr -2dB

$$Rw + (Ctr) = 29 (-2)$$

Evaluation based on theoretical method.
Margin of error is generally within $Rw \pm 3dB$

Approved by:
Michael Phillips, Director

M.A.A.S.
MArchSc (Audio & Acoustics),
AssocDeg (Audio Eng.)

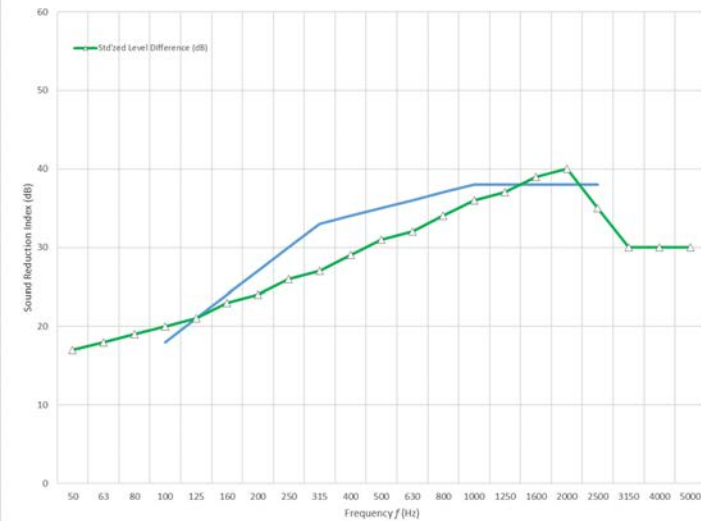
Sound Insulation Prediction

Client: Con-form Group

Product: Option C

Product Description: 1 x Sheet Metal (0.55mm) / 2x 0.8mm Steel / 25mm Polyester Porous Absorber
Partition surface mass = **19 kg/m²**

Date: 24/05/2022
Job No: J000295
Job Name: Acoustic+



| 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|----|-----|-----|-----|------|------|------|
| 18 | 21 | 26 | 31 | 35 | 37 | 30 |

Rw 34 dB
C -1 dB
Ctr -3dB

$$Rw + (Ctr) = 34 (-3)$$

Evaluation based on theoretical method.
Margin of error is generally within $Rw \pm 3dB$

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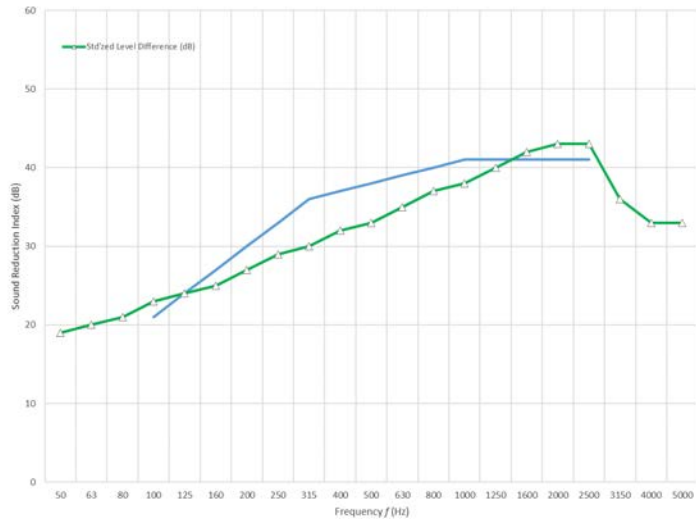
Sound Insulation Prediction

Client: Con-form Group

Product: Option D

Product Description: 1 x Sheet Metal (0.55mm) / 3x 0.8mm Steel / 25mm Polyester Porous Absorber
Partition surface mass = **25 kg/m²**

Date: 24/05/2022
Job No: J000295
Job Name: Acoustic+



| 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|----|-----|-----|-----|------|------|------|
| 20 | 24 | 28 | 33 | 38 | 42 | 34 |

Rw 37 dB
C -1 dB
Ctr -3dB

$Rw + (Ctr) = 37(-3)$

Evaluation based on theoretical method.
Margin of error is generally within $Rw \pm 3dB$

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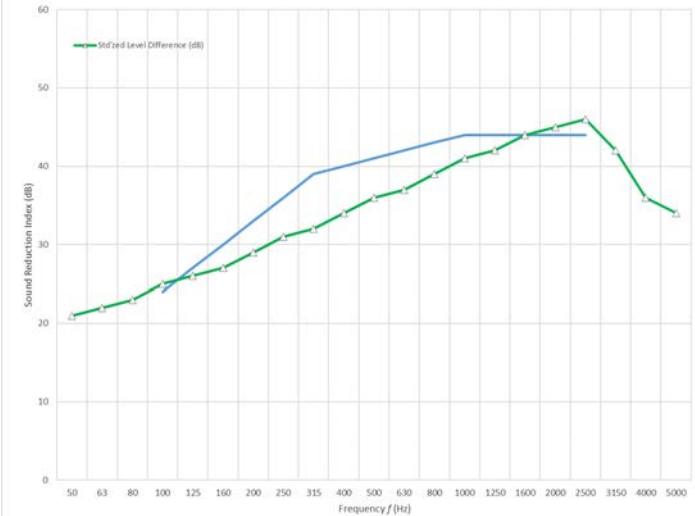
Sound Insulation Prediction

Client: Con-form Group

Product: Option E

Product Description: 1 x Sheet Metal (0.55mm) / 4x 0.8mm Steel / 25mm Polyester Porous Absorber
Partition surface mass = **31 kg/m²**

Date: 24/05/2022
Job No: J000295
Job Name: Acoustic+



| 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 |
|----|-----|-----|-----|------|------|------|
| 22 | 26 | 30 | 35 | 40 | 45 | 37 |

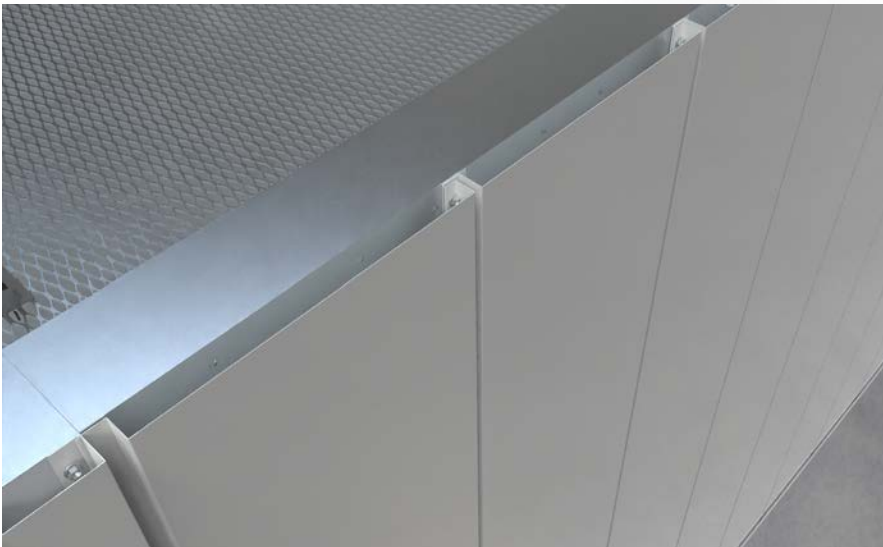
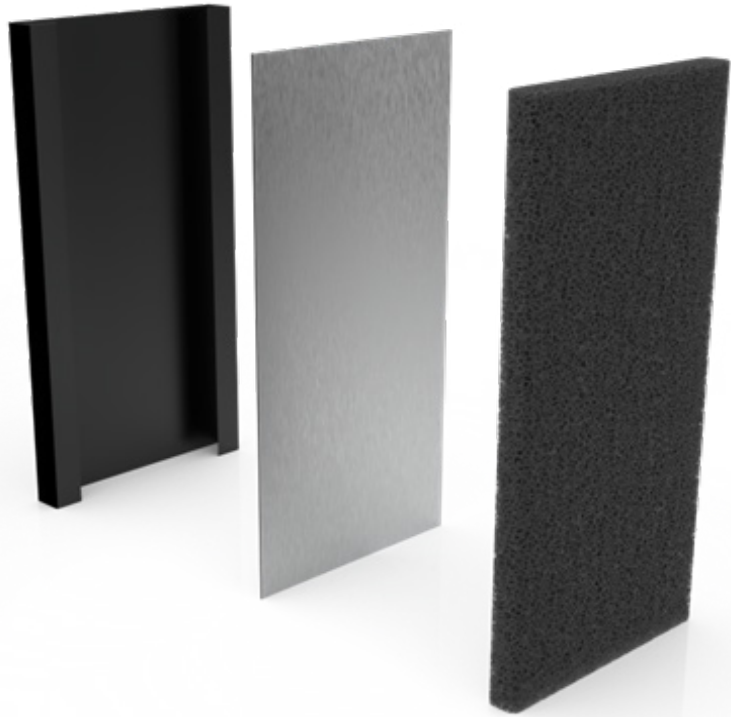
Rw 40 dB
C -1 dB
Ctr -4dB

$Rw + (Ctr) = 40(-4)$

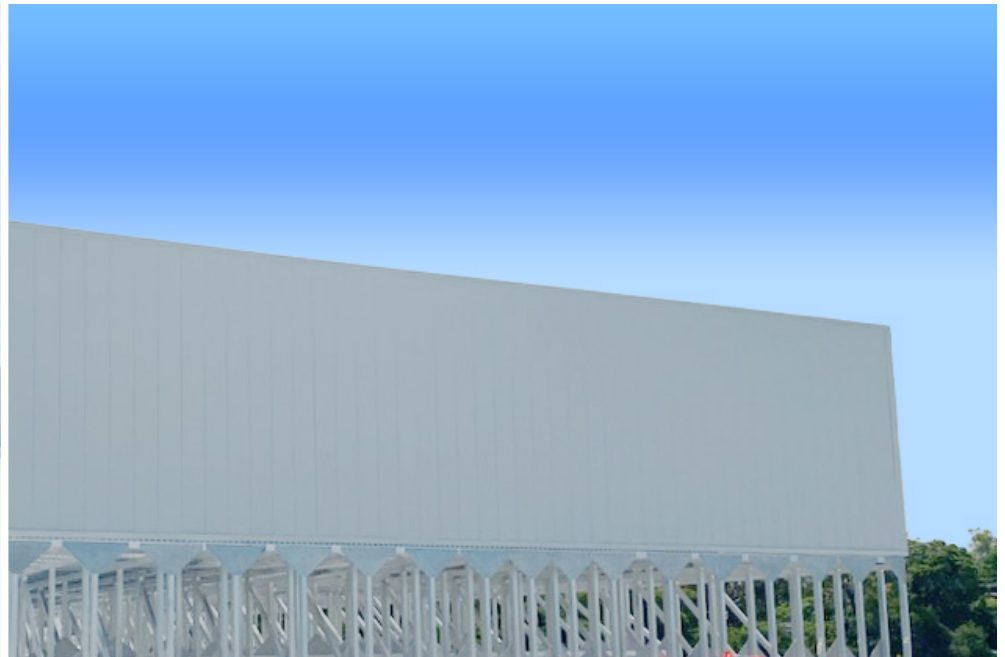
Evaluation based on theoretical method.
Margin of error is generally within $Rw \pm 3dB$

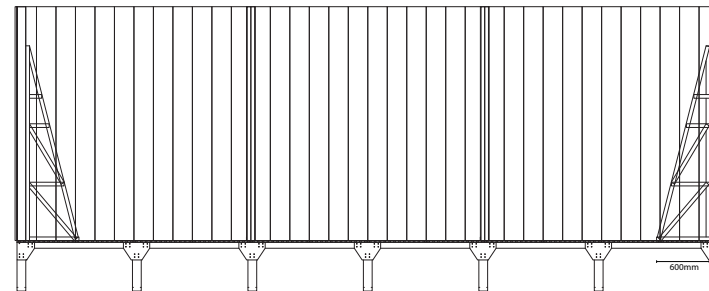
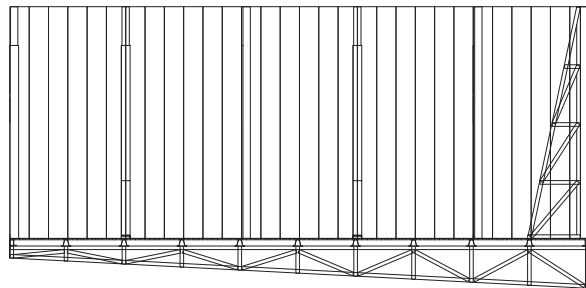
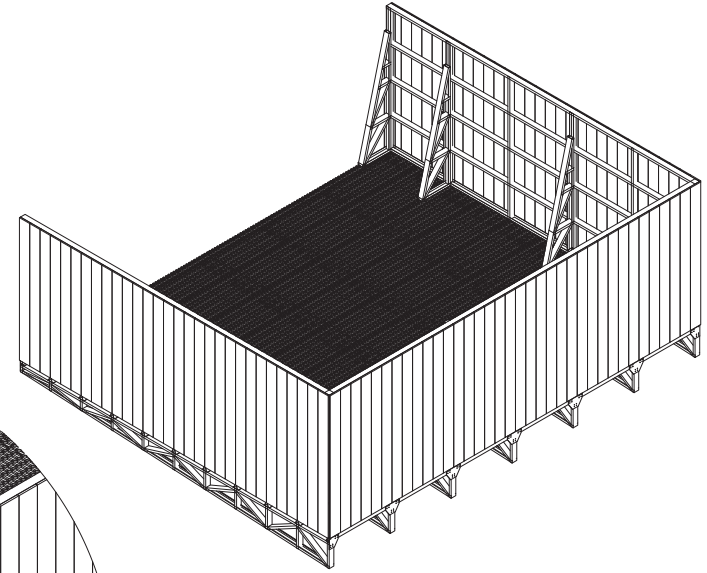
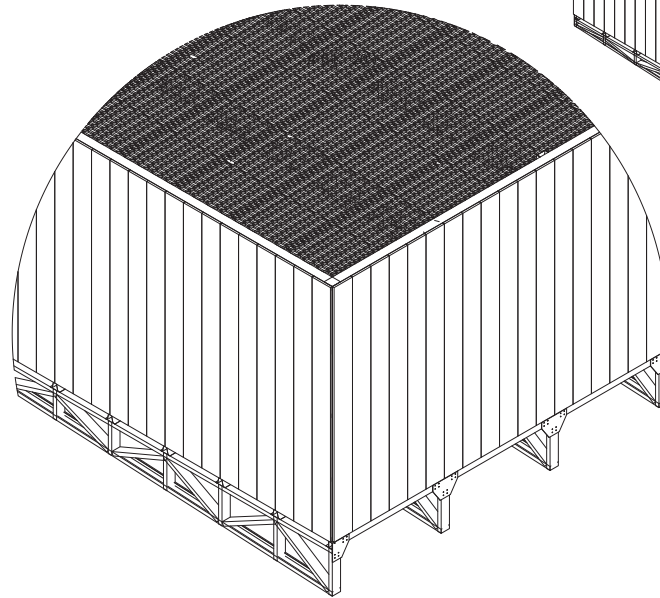
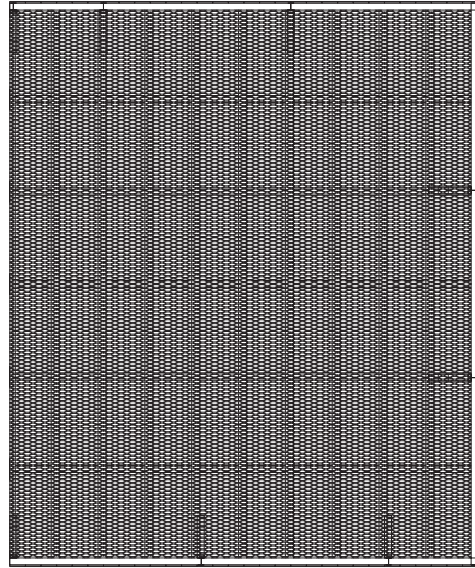
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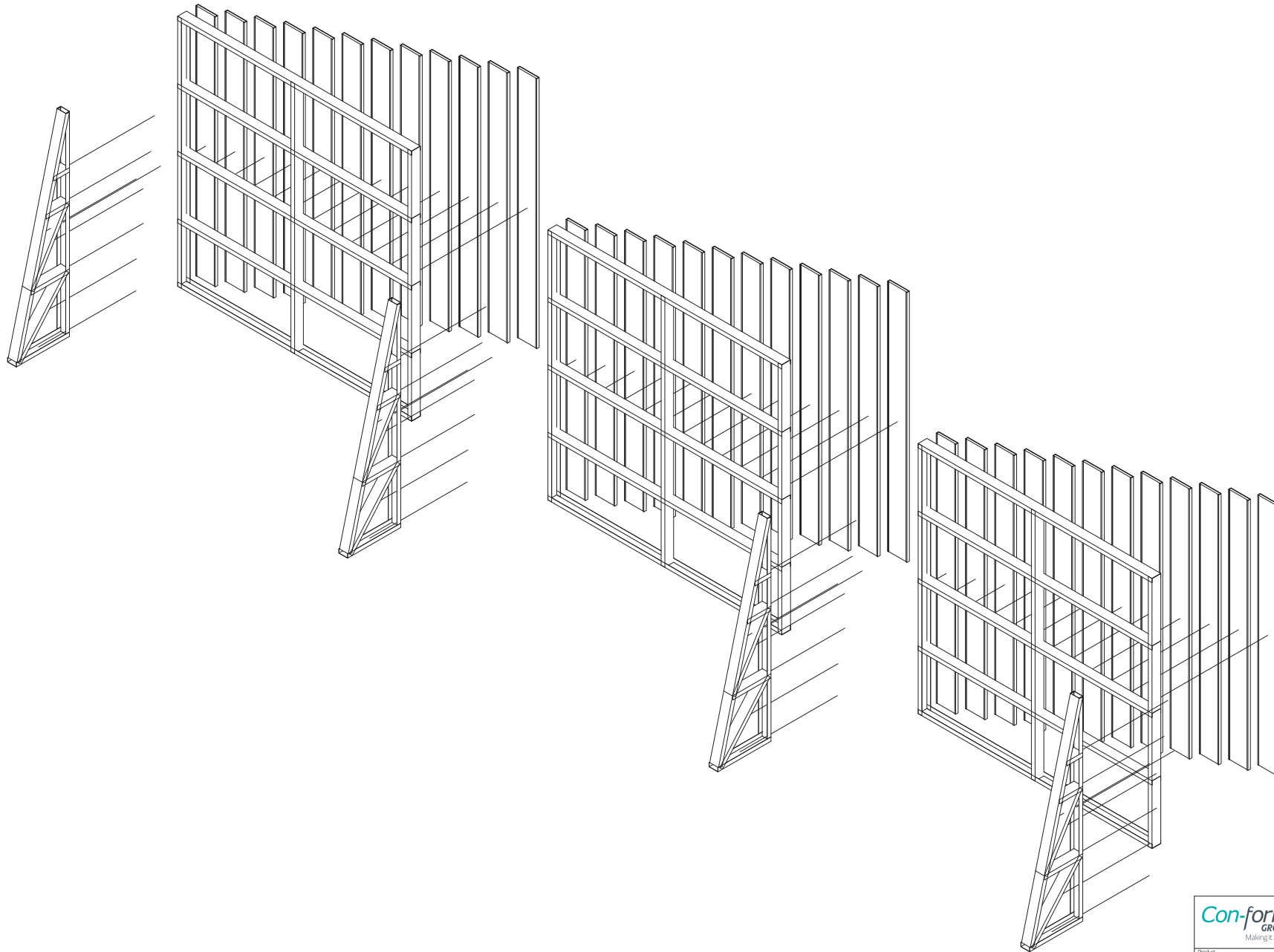






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| <p>Con-form GROUP Making it Easy</p> | |
| | <p>ALL DIMS. GIVEN IN MM NOT TO SCALE</p> |
| <p>Product: Acoustic+</p> | |
| <p>Drawing Title: Technical Data Sheet</p> | |
| <p>2 OF 2</p> | |

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| | |
| <p>Drawing title: Technical Data Sheet</p> | |
| <p>1 OF 2</p> | |

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