Will Oliver From: Sent: 04 July 2022 10:40 To: Planning Cc: Andy Little **Subject:** Re: NYM/2022/0328 **Attachments:** DTS015 AS35 Datasheet Issue 03 25.01.21.pdf Good Morning Mr Muir, Please see attached data sheet for the insulated wall and roof panels. Kind Regards, Will On Thu, 9 Jun 2022 at 11:27, Will Oliver wrote: Hi Mr Muir, Thank you for your time on the phone this morning. As discussed, we feel it unfair that the 10% requirement to displace CO2 emissions be mandatory for this project due to the fact that we are replacing the building due to neighbouring wall damage. Yes as you mentioned, an insurance claim was made, however, construction prices have increased dramatically since then. Our client is interested in including solar pv, however, we don't feel this should be documented as a planning requirement. Please note, we are looking into retaining the existing slab which will provide a great carbon saving. I have attached the Renewable Energy Supplementary Document which shows the low requirement. Kind Regards, Will On Tue, 7 Jun 2022 at 14:58, Will Oliver wrote: Dear Mr Muir, If you could please give me a call to discuss on that would be much appreciated. Kind Regards,

Will

STEADMANS AS35 ROOF & WALL PANEL

DTS015 DATA SHEET





STEADMANS AS35 ROOF & WALL PANEL

Applications

The AS35 insulated panel is a self-supporting composite panel for roofing and cladding. The external face of the panel has a clean sharp profile and is available in an extensive range of colours and finishes.

The AS35 insulated panel is ideal for roofing and cladding steel framed buildings and can be fully integrated with both modern and traditional methods of construction.

The attractive and durable external building product is suitable for a variety of application:

- Retail parks
- Office buildings
- Schools
- Sports Centres
- Commercial unit

Core Material

Steadmans AS35 insulated panel is made from a polyisocyanurate core. (PIR)

AS35 panel dimensions

| AS35 panel dimensions | |
|--------------------------|---|
| Exterior sheet thickness | 0.5mm |
| Liner sheet thickness | 0.4mm |
| Cover width | 1000mm |
| Standard lengths | 1.8 - 14m |
| Panel thickness | 40, 60, 70, 80, 100, 110, 120, 130mm |

AS35 panel lengths

AS35 composite panel is available in lengths between 1.8m to 14m as standard. Short sheets under 1.8m and longer sheets up to 22m are available at additional cost.

Guarantee

The AS35 panel offers a system guarantee of 25 years combined with a material warranty of up 40 years providing a comprehensive and protected cladding option.

Manufacturing Tolerances

| ASMR wall panel tolerances | | | | | |
|----------------------------|---------|--|--|--|--|
| Panel Length | +/- 5mm | | | | |
| Cover Width | +/- 2mm | | | | |
| Thickness | +/- 2mm | | | | |
| Squareness | <3mm | | | | |

Thermal

The insulated panels make a vital contribution to the implementation of a fabric first strategy, by addressing conduction heat loss, air tightness and heat loss through junctions.

Conduction heat loss: AS35 insulated panels contain high performance PIR insulation, and are effective in reducing conduction heat loss through roofs and walls. They offer a range of U-values, enabling designers to match the notional building wall U-values or substantially improve on them.

Extensive thermal analysis has been carried out for panel junctions and can provide a range of design details to minimise heat loss.

U -values for AS35 panel

| AS35 panel U-Values | | | | | |
|---------------------|-----------------|--|--|--|--|
| Panel Thickness | U-Value (W/m²K) | | | | |
| 40mm | 0.50 | | | | |
| 60mm | 0.35 | | | | |
| 70mm | 0.30 | | | | |
| 80mm | 0.25 | | | | |
| 100mm | 0.20 | | | | |
| 110mm | 0.18 | | | | |
| 120mm | 0.16 | | | | |
| 130mm | 0.15 | | | | |



STEADMANS AS35 ROOF & WALL PANEL

Environmental

Developing sustainable construction methods presents a challenge to the whole construction industry. Our main raw material, steel, is eminently recyclable: 85 - 90% of steel from demolition goes for re-use and 40% of steel used in new construction has been recycled. Steadmans is certified to ISO14001:2015 and we are signatories to the sustainability charter of EPIC (Engineered Panels In Construction).

Fire

BS 476-7:1997: Class 1 (surface spread of flame) Building Regulations Approved Document B - Class 0. BS EN 13501-1:2018: B-s2,d0 (reaction to fire)

AS35 panels have passed the test requirements of LPS 1181:2005; the testing standard of the Loss Prevention Certification Board (LPCB) achieving Grade EXT-B approval.

NOTE: LPS 1181 Grade EXT-B is only applicable under specific conditions. Please contact Steadmans for further information.

Quality assurance

We manufacture all our products to the highest quality standard, operating a BRE certified Quality Management System in compliance with the requirements of ISO 9001:2015. Our products are manufactured from the highest-quality materials from our approved supply chain, using state-of-the-art production facilities which are rigorously controlled through inspection and testing at each production stage. Our products are designed and manufactured in accordance with all related and prevailing standards.

| Fire Performance to LPS 1181:2005 | | | | | | | | |
|-----------------------------------|-------|---------------------------------------|-------------|---------------------|-------------------|-------------------|------------------|--|
| LPCB Ref. | Panel | Thickness (mm) | Orientation | Integrity (mins) | Insulation (mins) | LPS 1181 Grade | Core Material | |
| 635a/08 | AS35 | 40, 60, 70, 80, 100, 110, 120, 130 | V | N/A | N/A | EXT-B | PIR | |

Health and Safety

Our Business Delivery is managed efficiently and responsibly through the practise of our accredited Occupational Health and Safety Management System in compliance with the requirements of ISO 45001:2018. Through our Management System we promote a safe and healthy working environment by providing a framework that allows our organisation to identify and control its health and safety risks, reduce the potential for accidents, ensure legislative compliance and improve overall performance.

CE Marking

The AS35 insulated panels are CE marked to BS EN 14509:2013 Self-supporting double skin metal faced insulating panels. Factory made products. The required Declarations of Performance (DoP) for Steadmans insulated panels and other CE marked products are available upon request.

Steadmans also supply relevant DoPs with invoices.



STEADMANS AS35 ROOF & WALL PANEL

Coatings

AS35 panels can be manufactured from an extensive colour range of pre-coated steel materials. Range of material options are listed below.

For more detailed information on coatings available please consult the Steadmans Coatings & Colour Selector brochure.

Available Materials

- Leathergrain Plastisol
- Nova
- Prisma

Acoustic

Acoustic performance has been predicted using software developed by the University of Salford, Department of Applied Acoustics and the MCRMA. The results below are based on an 80mm panel.

| Predicted Acc | Predicted Acoustic Performance | | | | | | | |
|-------------------|--------------------------------|-------------------|--------------------|--|--|--|--|--|
| Frequency (Hz) | SRI Values (dB) | Frequency (Hz) | SRI Values (dB) | | | | | |
| 100 | 19.9 | 800 | 26.3 | | | | | |
| 125 | 21.1 | 1000 | 32.0 | | | | | |
| 160 | 22.3 | 1250 | 32.8 | | | | | |
| 200 | 23.4 | 1600 | 36.5 | | | | | |
| 250 | 24.0 | 2000 | 43.3 | | | | | |
| 315 | 24.1 | 2500 | 46.9 | | | | | |
| 400 | 23.1 | 3150 | 51.2 | | | | | |
| 500 | 18.5 | 4000 | 55.4 | | | | | |
| 630 | 19.5 | 5000 | 59.8 | | | | | |

Air tightness

The nature of the insulated panel is such that a practical rigid surface is provided to enable sealing to be successful. Additionally the joint design and factory applied seals of the panel ensure air leakage is mitigated.

Packing

Steadmans insulated panels are delivered to site in plastic wrapped packs with end and side protection. The height of a pack and number of panels it contains depends upon the thickness of the panels. Typically, panels are packed in stacks up to 1100mm high.

AS35 panels are packed weather face together. Panels up to 6m long can be manually handled but longer lengths will require mechanical handling equipment.

| Panel core | 40 | 60 | 70 | 80 |
|---|-------|-------|-------|-------|
| Weight (kg/m) | 10.06 | 10.75 | 11.10 | 11.62 |
| Max Panels per pack (Up to 8m long) | 14 | 10 | 10 | 8 |

| Panel core | 100 | 110 | 120 | 130 |
|---|-------|-------|-------|-------|
| Weight (kg/m) | 12.38 | 12.86 | 13.34 | 13.66 |
| Max Panels per pack (Up to 8m long) | 6 | 6 | 6 | 6 |

Delivery

Packs should be off-loaded directly to the area where the panels will be used, which should be way from traffic. Packs may be stacked up to 2.5m on the pallets provided; bearers should be placed one above each other. Off-loading is the responsibility of the customer. Delivery by self-off-loading vehicles can be arranged.

Two methods of off-loading are recommended.

A forklift or telehandler can be used for off-loading packs up to 6m long.

For panels over 6m long a crane and slings should be used. Precautions should be taken when using slings to prevent any damage to the panel edges. Chains should not be used.

No more than one panel should be lifted at one time.



STEADMANS AS35 ROOF & WALL PANEL

Structural

AS35 insulated panels are self-supporting and capable of spanning supports at 1.5 - 3.0m centres. Wider spacing's can be accommodated, subject to fixing constraints. AS35 panels are designed to be fixed to steel purlins and side rails or secondary steelwork using appropriate self-drilling fasteners.

Repair and maintenance

Regular inspections are recommended in order to maintain the appearance and performance of panels.

Refer to Coatings and Colour Selector literature for full details of recommended maintenance regimes.

| Jnfactored | Infactored roof loads for AS35 panels – Outer facing 0.5mm (steel), inner facing 0.4mm (steel) | | | | | | | | | |
|------------|--|-----------|---|-------|-------|-------|-------|-------|-------|-------|
| | Panel Thickness | Load Type | Uniformly distributed loads kN/m². Span L in metres | | | | | | | |
| | (mm) | , , | 1.60m | 1.80m | 2.00m | 2.20m | 2.40m | 2.60m | 2.80m | 3.00m |
| | 40 | Downward | 2.24 | 1.92 | 1.67 | 1.31 | 1.04 | 0.89 | 0.69 | 0.54 |
| | 40 | Suction | 2.62 | 2.24 | 1.94 | 1.70 | 1.50 | 1.33 | 1.19 | 1.02 |
| | co | Downward | 3.26 | 2.85 | 2.51 | 2.03 | 1.67 | 1.30 | 1.07 | 0.84 |
| | 60 | Suction | 3.80 | 3.32 | 2.92 | 2.58 | 2.30 | 1.94 | 1.65 | 1.41 |
| | 70 | Downward | 3.80 | 3.35 | 2.97 | 2.35 | 1.95 | 1.54 | 1.28 | 1.01 |
| | 70 | Suction | 4.43 | 3.90 | 3.45 | 3.06 | 2.62 | 2.21 | 1.88 | 1.62 |
| | 00 | Downward | 4.34 | 3.84 | 3.31 | 2.68 | 2.19 | 1.80 | 1.48 | 1.22 |
| | 80 | Suction | 5.06 | 4.47 | 3.97 | 3.54 | 2.94 | 2.47 | 2.11 | 1.82 |
| ingle Span | 400 | Downward | 5.40 | 4.81 | 4.10 | 3.30 | 2.74 | 2.29 | 1.92 | 1.61 |
| | 100 | Suction | 6.37 | 5.67 | 5.07 | 4.30 | 3.57 | 3.01 | 2.57 | 2.22 |
| | | Downward | 5.86 | 5.24 | 4.50 | 3.68 | 3.09 | 2.67 | 2.26 | 1.92 |
| | 110 | Suction | 6.76 | 6.01 | 5.45 | 4.61 | 3.84 | 3.24 | 2.77 | 2.39 |
| | | Downward | 6.31 | 5.66 | 4.90 | 4.05 | 3.43 | 3.04 | 2.60 | 2.23 |
| | 120 | Suction | 7.14 | 6.35 | 5.82 | 4.92 | 4.10 | 3.46 | 2.96 | 2.56 |
| | | Downward | 6.69 | 6.02 | 5.23 | 4.36 | 3.72 | 3.35 | 2.90 | 2.50 |
| | 130 | Suction | 7.14 | 6.36 | 5.91 | 5.16 | 4.30 | 3.63 | 3.11 | 2.69 |
| | | Downward | 2.24 | 1.92 | 1.67 | 1.47 | 1.30 | 1.14 | 1.00 | 0.85 |
| | 40 | Suction | 6.62 | 2.24 | 1.94 | 1.70 | 1.50 | 1.33 | 1.19 | 1.02 |
| | | Downward | 2.79 | 2.46 | 2.13 | 1.81 | 1.56 | 1.36 | 1.20 | 1.06 |
| | 60 | Suction | 3.48 | 2.88 | 2.48 | 2.15 | 1.89 | 1.69 | 1.52 | 1.38 |
| | | Downward | 2.95 | 2.60 | 2.27 | 1.93 | 1.67 | 1.45 | 1.28 | 1.14 |
| | 70 | Suction | 3.58 | 3.00 | 2.57 | 2.23 | 1.97 | 1.76 | 1.59 | 1.45 |
| | | Downward | 3.11 | 2.74 | 2.40 | 2.05 | 1.77 | 1.55 | 1.37 | 1.22 |
| Double | 80 | Suction | 3.66 | 3.07 | 2.63 | 2.30 | 2.03 | 1.82 | 1.64 | 1.50 |
| Span | | Downward | 3.44 | 3.03 | 2.67 | 2.28 | 1.98 | 1.74 | 1.54 | 1.38 |
| | 100 | Suction | 3.76 | 3.17 | 2.73 | 2.39 | 2.12 | 1.90 | 1.72 | 1.57 |
| | | Downward | 3.60 | 3.17 | 2.79 | 2.39 | 2.08 | 1.83 | 1.62 | 1.45 |
| | 110 | Suction | 3.79 | 3.20 | 2.76 | 2.42 | 2.15 | 1.93 | 1.75 | 1.59 |
| | | Downward | 3.76 | 3.31 | 2.91 | 2.50 | 2.17 | 1.91 | 1.70 | 1.52 |
| | 120 | Suction | 3.81 | 3.23 | 2.78 | 2.44 | 2.17 | 1.95 | 1.77 | 1.61 |
| | | Downward | 3.90 | 3.48 | 3.02 | 2.59 | 2.26 | 1.99 | 1.77 | 1.58 |
| | 130 | Suction | 3.82 | 3.24 | 2.80 | 2.45 | 2.18 | 1.96 | 1.78 | 1.63 |



STEADMANS AS35 ROOF & WALL PANEL

| | Panel | for AS35pa | | | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | (** | | | |
|-----------|-----------|------------|---|-------|---|-------|-------|-------|-------|-------|
| | Thickness | | Uniformly distributed loads kN/m². Span L in metres | | | | | | | |
| | (mm) | Load Type | 1.60m | 1.80m | 2.00m | 2.20m | 2.40m | 2.60m | 2.80m | 3.00m |
| | (11111) | Danasa | | | | | | | | |
| | 40 | Pressure | 1.94 | 1.65 | 1.42 | 1.10 | 0.86 | 0.73 | 0.56 | 0.48 |
| | | Suction | 2.35 | 2.00 | 1.72 | 1.49 | 1.31 | 1.15 | 1.02 | 0.91 |
| | 60 | Pressure | 2.93 | 2.55 | 2.23 | 1.78 | 1.46 | 1.13 | 0.92 | 0.71 |
| | | Suction | 3.51 | 3.05 | 2.67 | 2.35 | 2.08 | 1.86 | 1.66 | 1.49 |
| | 70 | Pressure | 3.46 | 3.01 | 2.67 | 2.09 | 1.72 | 1.36 | 1.11 | 0.87 |
| | | Suction | 4.12 | 3.62 | 3.17 | 2.82 | 2.44 | 2.09 | 1.89 | 1.66 |
| | 80 | Pressure | 4.00 | 3.52 | 3.02 | 2.43 | 1.97 | 1.62 | 1.32 | 1.06 |
| ngle Span | | Suction | 4.75 | 4.19 | 3.71 | 3.29 | 2.94 | 2.55 | 2.19 | 1.90 |
| | 100 | Pressure | 5.04 | 4.47 | 3.81 | 3.06 | 2.52 | 2.10 | 1.75 | 1.46 |
| | | Suction | 6.04 | 5.37 | 4.79 | 4.28 | 3.65 | 3.10 | 2.66 | 2.31 |
| | 110 | Pressure | 5.47 | 4.87 | 4.18 | 3.40 | 2.84 | 2.45 | 2.06 | 1.74 |
| | | Suction | 6.41 | 5.69 | 5.14 | 4.59 | 3.87 | 3.27 | 2.82 | 2.44 |
| | 120 | Pressure | 5.89 | 5.27 | 4.55 | 3.75 | 3.16 | 2.79 | 2.37 | 2.03 |
| | | Suction | 6.77 | 6.01 | 5.50 | 4.90 | 4.14 | 3.49 | 3.02 | 2.61 |
| | 130 | Pressure | 6.25 | 5.60 | 4.86 | 4.04 | 3.42 | 3.07 | 2.65 | 2.27 |
| | | Suction | 6.77 | 6.02 | 5.58 | 5.13 | 4.34 | 3.67 | 3.17 | 2.74 |
| | 40 | Pressure | 1.94 | 1.65 | 1.42 | 1.23 | 1.08 | 0.93 | 0.81 | 0.75 |
| | | Suction | 2.35 | 2.00 | 1.72 | 1.49 | 1.31 | 1.15 | 1.02 | 0.91 |
| | 60 | Pressure | 2.80 | 2.49 | 2.16 | 1.78 | 1.50 | 1.27 | 1.08 | 0.93 |
| | | Suction | 3.21 | 2.65 | 2.27 | 1.96 | 1.71 | 1.62 | 1.53 | 1.46 |
| | 70 | Pressure | 2.96 | 2.63 | 2.30 | 1.91 | 1.64 | 1.38 | 1.22 | 1.03 |
| | | Suction | 3.33 | 2.79 | 2.36 | 2.05 | 1.83 | 1.72 | 1.62 | 1.52 |
| | 80 | Pressure | 3.11 | 2.76 | 2.43 | 2.09 | 1.82 | 1.61 | 1.43 | 1.27 |
| Double | | Suction | 3.44 | 2.88 | 2.46 | 2.14 | 2.03 | 1.88 | 1.70 | 1.57 |
| Span | 100 | Pressure | 3.44 | 3.04 | 2.70 | 2.31 | 2.02 | 1.79 | 1.60 | 1.44 |
| | | Suction | 3.57 | 3.00 | 2.58 | 2.38 | 2.17 | 1.96 | 1.78 | 1.63 |
| | 110 | Pressure | 3.50 | 3.18 | 2.82 | 2.42 | 2.12 | 1.86 | 1.67 | 1.49 |
| | | Suction | 3.59 | 3.03 | 2.60 | 2.40 | 2.19 | 1.98 | 1.80 | 1.64 |
| | 120 | Pressure | 3.76 | 3.32 | 2.94 | 2.53 | 2.22 | 1.95 | 1.75 | 1.57 |
| | 120 | Suction | 3.61 | 3.06 | 2.63 | 2.43 | 2.22 | 2.01 | 1.82 | 1.66 |
| | 130 | Pressure | 3.90 | 3.49 | 3.05 | 2.62 | 2.31 | 2.02 | 1.82 | 1.63 |
| | 130 | Suction | 3.62 | 3.07 | 2.64 | 2.44 | 2.23 | 2.02 | 1.83 | 1.67 |



Engand & Wales

Warnell, Welton

Carlisle

Cumbria

CA5 7HH

Tel: 016974 78277

Fax: 016974 78530

Scotland & Ireland

Unit C, Coalburn Road

Fallside Ind Est,

Bothwell

G71 8DA

Tel: 01698 819 050

Fax: 01698 801 764

Mill of Crichie

Fyvie, Turriff

vic, rairiii

Aberdeenshire AB53 8QL

Tel: 01651 891 668

Fax: 01651 891 698



E-mail: info@steadmans.co.uk

Online: www.steadmans.co.uk

Steadmans

DTS015 AS35 Datasheet Issue 03 25.01.21