

Energi Panel Solar Air Heating Delivery System Installation

Energi Panel Delivery System components (supplied by Kingspan Group Plc)

- **Insulated Panel/Solar Collector**
- **Collection/Delivery Unit complete with installed fan and grilles**
- **Control system i.e. Controller units and Sensors**

Material list required for the installation of the Energi Panel system (supplied by customer)

Description	Code	Supplier
Expanding Foam Tape	BG 1.5-3 x 10mm x 8m	Premier Sealants
Hole saw	3" 76mm	Hardware Store
Peel Rivets	TPR-L-6.3x38	SFS
Plenum Lapping screws	SXL2-L12-S16-6.3x25-RAL9010	SFS
Fixing head for lapping screw	E420 socket	SFS
Cable Clamp self drill/self tap	No 6 x 12.7 mm 278-017	Radionics

Further Installation Points

- Electrical cable will be supplied by the electrical contractor carrying the installation
- Wiring of fans back to controllers requires standard low grade electrical cable
- Wiring of sensors back to controllers requires screened cable
- Other equipment required for installation include; drills, peel rivet guns, levels, markers, tapes, drill bits, knives and mechanical lifts.

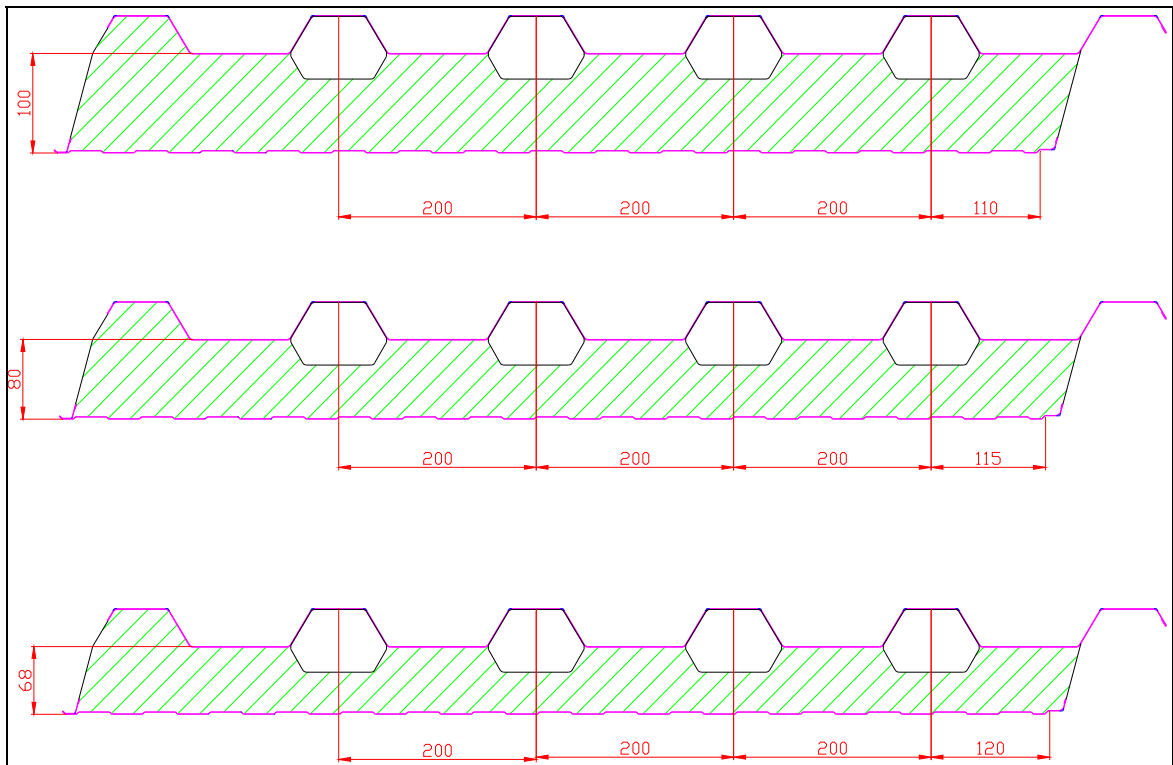
Installation Procedure

The standard SOP for installation of the Energi Panel delivery system is as follows;



1. Check height for centre of plenum from construction drawings and place horizontal plumb line across panels that are to have plenum attached

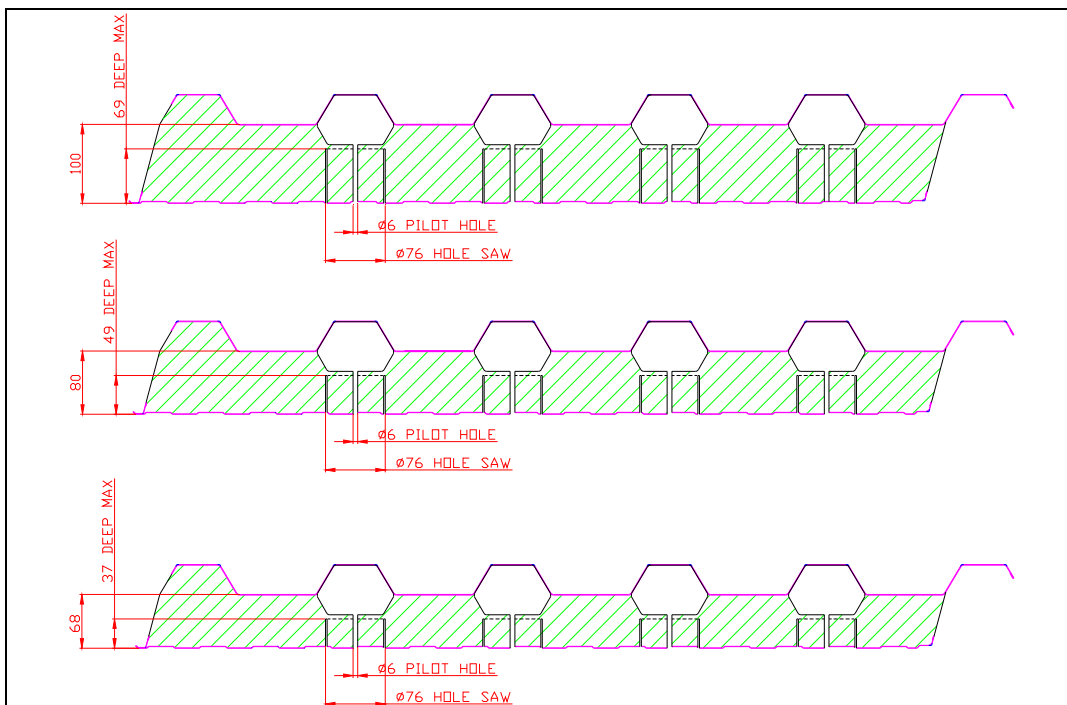
2. Mark centre of holes as per sketch below; (for 68mm panel centre mark 120mm from underlap for first hole).





3. Mark 3 holes 200mm apart as per above sketch

4. Pilot drill holes using a ¼" or 6mm drill bit



5. Cut holes with 3" (76mm) hole saw to correct depth; 37mm for 68mm panel, 49mm for 80mm panel and 69mm for 100mm panel



7. Using a long blade cut through remaining foam and foil

6. Remove cut piece from panel



8. Place Temperature sensor inside plenum adjacent to fan inlet.

9. Place expandable foam tape around plenum edge.



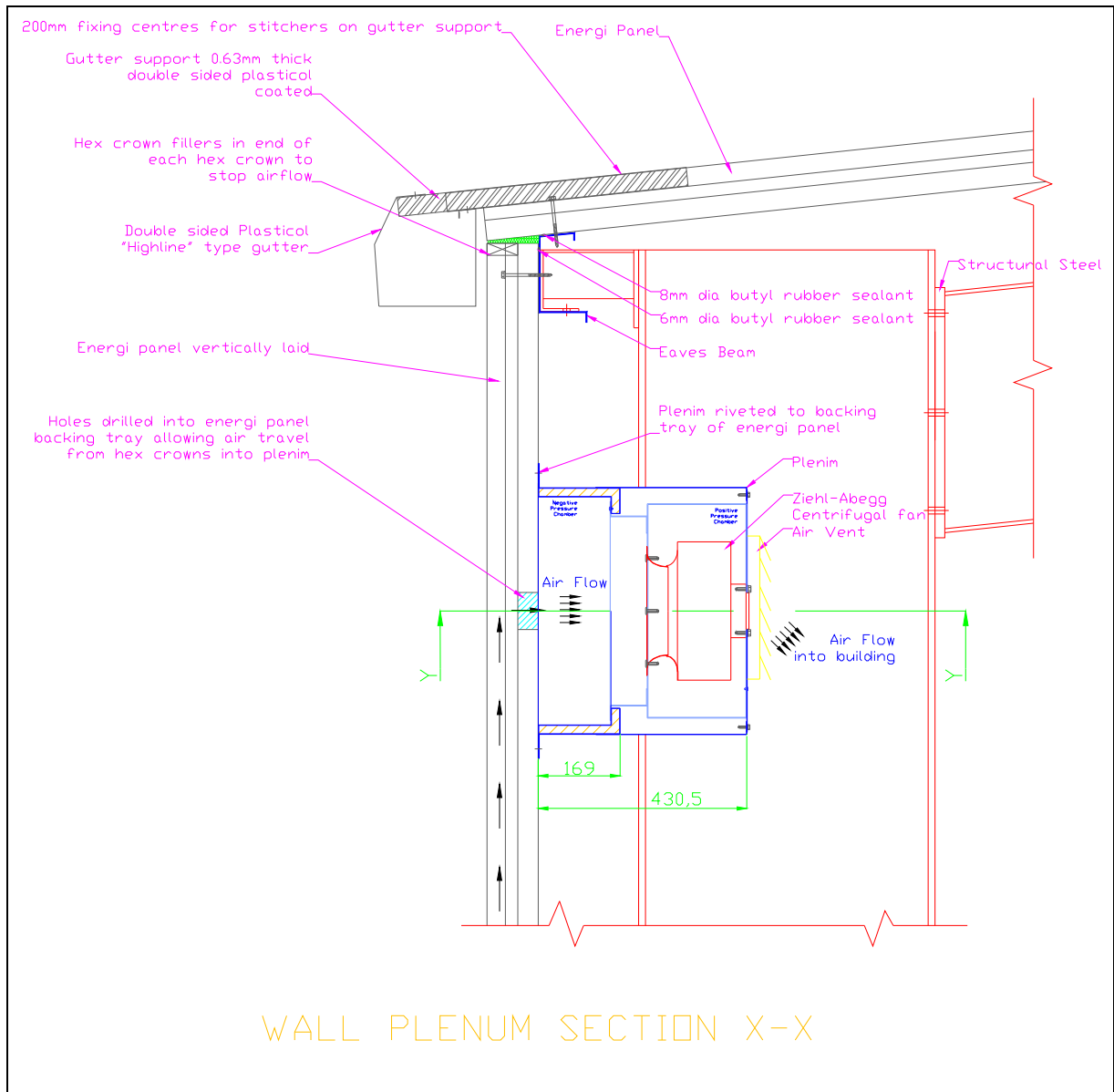
10. Position plenum centrally to cover holes drilled in panel and fix in place using peel rivets.



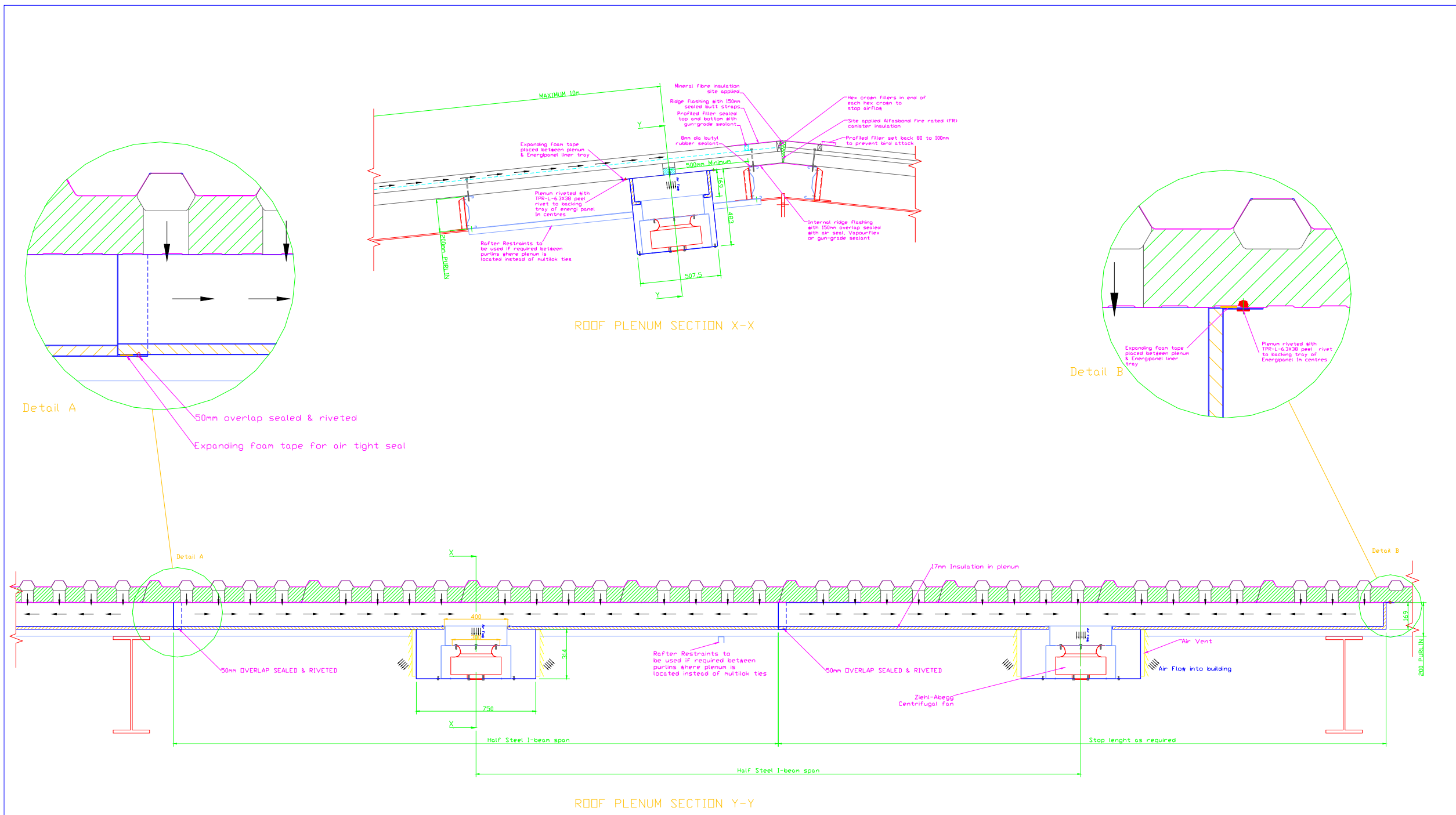
11. Peel Rivet TPR-L-6.3x38 fixings at 1m centres. Drill 6.5mm holes through plenum into Energipanel. Plenum holes predrilled.



12. Plenum fans wired back to controllers.



15. Plenum design to suit building depending on size, length of Energipanel used and distance between steel work.



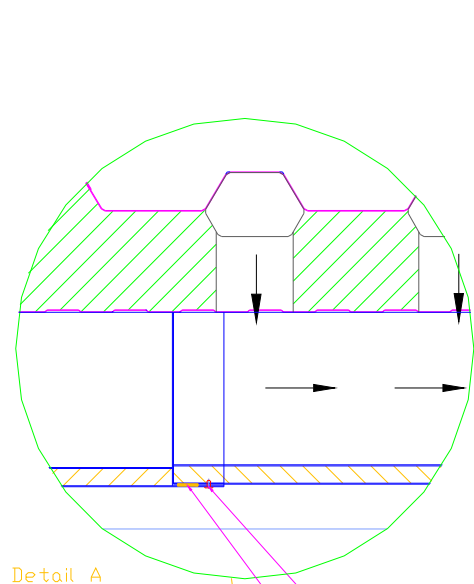
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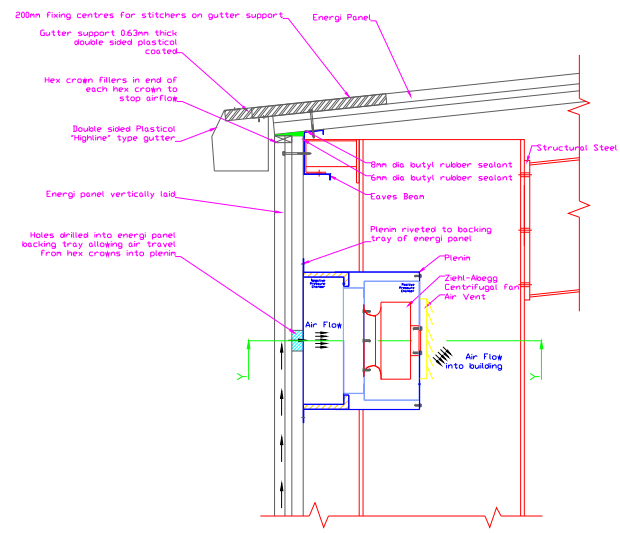
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CHECKED BY D. Cookson	DATE XX/XX/XX
APPROVED BY D. Cookson	DATE XX/XX/XX
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	Kingspan R&D Centre, Dublin Rd, Kingscourt, Co. Cavan. Tel: +353 42 9693052 Fax: +353 42 9693020
	Energi Panel Roof Plenum Detail
SHEET X of X	DWG NO EP 201

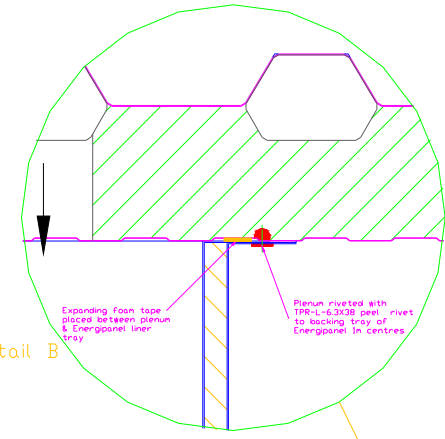
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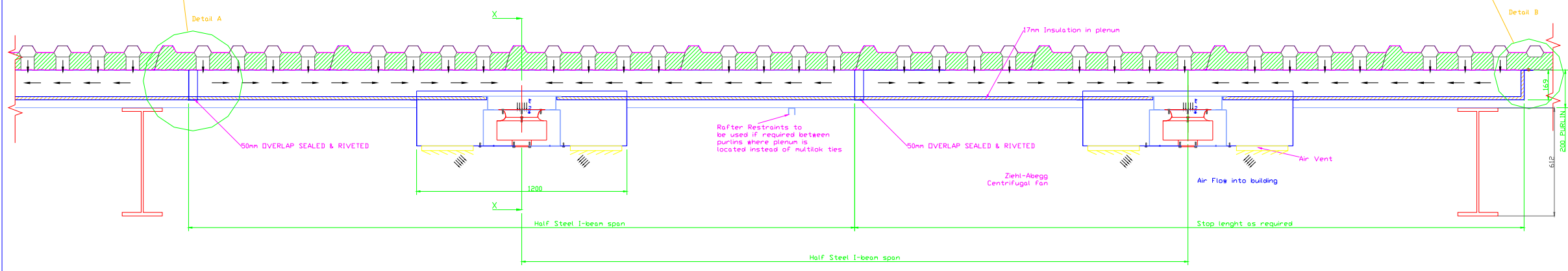
Detail A
50mm overlap sealed & riveted
Expanding foam tape for air tight seal



WALL PLENUM SECTION X-X



Detail B
Expanding foam tape placed between plenum & Energi Panel liner
Plenum riveted with TPR-L-6.3338 panel rivets to backing tray of Energi Panel in centres



WALL PLENUM SECTION Y-Y

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