EC 97911-128

1600 PowerWall™ - FEATURES

Features

- Curtain wall system that incorporates solar photovoltaic (PV) infill in lieu of standard glass infills.
- Outside glazed system based on the 1600 System[™] 3 platform.
- Available in a 6" (152.4) or 7-1/2" (190.5) system depth.
- PV infill can be comprised of thin film or crystalline photovoltaic laminates, with a choice of transparencies (thin film) and cell spacing configurations (crystalline).
- Infill can be monolithic laminates, or IG units for better thermal performance.
- Wiring from PV infill can be concealed within curtain wall.
- Pressure plate capture allows for easy installation and replacement of PV infill.

Product Notes

- 1. 1600 PowerWall[™] has been designed to be used with the 1600 System[™] 3 platform. Product notes applicable to 1600 System[™]3 are also applicable to 1600 PowerWall[™].
- 2. For applications requiring a different Kawneer glazing system, contact your Kawneer representative.
- 3. Orders must be for system sizes totaling 1,000 square feet or larger.
- 4. PV infills for PowerWall™ are supplied by Kawneer. Contact your Kawneer representative for more information on the types of infills available, or to request a specific type of infill.
- 5. PV laminate output will vary based on the type of PV technology used, nominal capacity (Watts) installed, shading, orientation, and other design factors.
- 6. As with all PV systems, electrical engineering expertise is required to define the string configuration and select the appropriate balance of system hardware.
- 7. An electrical contractor or PV systems integrator will be required to wire the PowerWall™ system in the field, and set up the balance of system.
- 8. In order to help design a PowerWall™ solution, Kawneer must be provided with:
 - A wiring diagram showing the proposed string configuration
 - A wiring plan showing wire management from the PV façade to the inverters
 - Detailed elevation drawings for elevations containing PV infill
- 9. 1600 PowerWall™ bonding (grounding) must be verified with AUTHORITIES HAVING JURISDICTION on a per project basis.
- 10. Kawneer is not responsible for wire management beyond the PowerWall™ framing system.
- 11. 1600 PowerWall™ is not UL certified.
- 12. PowerWall™ designs for each project must be stamped by a PROFESSIONAL ENGINEER and must be approved by AUTHORITIES HAVING JURISDICTION prior to installation.

For specific product applications, Consult your Kawneer representative.



STRING 1 X PV INFILLS PER STRING X PV INFILLS PER STRING X PV INFILLS PER STRING INVERTER OR BATTERY CHARGER BOS (Balance of System)



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EC 97911-128 1600 PowerWall™ - FAQ

FAQ

What kind of power does PowerWall™ generate?

The PV infill used in 1600 PowerWall[™] generates DC power, which is typically converted to AC power using an inverter. The inverter is a part of the balance of system (BOS). A DC only system (i.e. no coversion to AC) will require different BOS components which may vary by application.

2. What is a PV system integrator and why do I need one?

A PV system integrator has the expertise to set up a PV system. The PV system integrator will be responsible for wiring the PowerWall™ system in the field and setting up the BOS.

3. Is electrical engineering experience required?

Electrical engineering experience is required to provide the overall electrical design including determining the optimum PV string layout and specifying appropriate balance of system hardware like inverters.

4. Who will glaze in the PV infill?

The PV infill will be glazed in by a glazing contractor (Kawneer customer).

- 5. What type of solar photovoltaic technology can be used with PowerWall™? PowerWall™ can incorporate PV infills with thin film PV cells or crystalline PV cells The infill can be simply a glass-glass laminate, or an IG unit with the PV laminate as the exterior layer.
- 6. What colors are the PV infills available in?

Thin film PV is typically brown, grey, or black with a choice of transparencies created by etching some of the PV material away. PV infills with crystalline cells typically incorporate either black or dark blue cells, with spaces of clear glass in between. Additional options may be available, so contact your Kawneer representative for more information.



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Laws and building and safety codes governing the design and use of glazed entrance, window, and curtain wail products vary widely, Kawneer does not control the selection of product configurations, operating hardware, or glazing materials, and assumes no responsibility therefor.

Kawneer reserves the right to change configuration without prior notice when deemed necessary for product improvement.

