

This document details the information that is required in order to complete a full SolarWall® perforated Transpired Solar Collector (pTSC) analysis and estimate the potential energy and carbon savings that could be attained. Although not all of the information below is required to complete a **basic** analysis, the more information that can be supplied at the design stage, the more accurate the final study will be.

- **Building parameters**

- An address & postcode for the area of the development. This is required in order to obtain local weather data from NASA.
- CAD drawings detailing elevations and site plan*.

*It is vital that an accurate compass point is included within the drawing to determine the exact orientation of the building and hence it's elevations.

- What is the wall construction / system to be used behind the SolarWall® (manufacturer and type).
- CAD drawings detailing steelwork / section through etc are required to allow for SolarWall® supporting options and spigot / inlet positions to be determined.
- Does the building contain any racking or storage areas? If so, where are these located and what are their dimensions?
- Are there any other additional obstructions which need to be considered i.e. cranes, pipework etc? If so then these should be ideally noted on the building layout plan.

- **Required ventilation rates**

- Fresh air rate(s) for the building(s) in question*. If these are unknown, the SolarWall® system will be designed to provide the optimum balance between air flow and temperature rise.

*If the SolarWall® is working in conjunction with specific ventilation / heating equipment, then the details of this equipment will also need to be known.

- **Mechanical drawings**

- Detailed drawings / images showing existing or proposed ductwork / localised heating / extraction units. These are necessary to allow for accurate placement of SolarWall® fans and ducts.
- Does the building require any special design considerations with regards to ducting?

- **Indoor temperatures**

- Will only frost protection be required or is there a set indoor temperature requirement.
- What areas of the building are to be serviced, do these areas have different temperature requirements?

- **Operating schedule of the building**

- What will be the operational period of the building; 24/7, 8 till 8, 5 days a week?

- **Colour**

- Required colour of the SolarWall® collector. Note that the darker the panel, the more efficient.

- **Is fire an issue**

- Does the proposed elevation for the SolarWall® have a firewall requirement? If so, what periods of integrity and insulation are required?