

Example name:

Template completed by:

RN*rosita.norvaisiene@ktu.lt***For installations**

BISTS Location:

Räterweg 17 A - 6800

Feldkirch, Austria

47°15'59.5"N 9°36'29.2"E

Climate Type: Maritime
temperate climate (*Cfb*)Building Use: *residential*

Level of BISTS integration

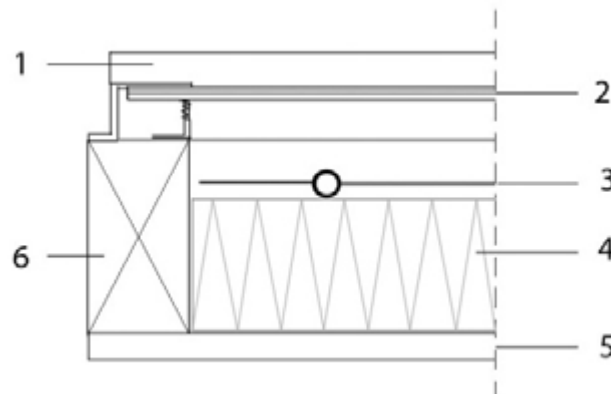
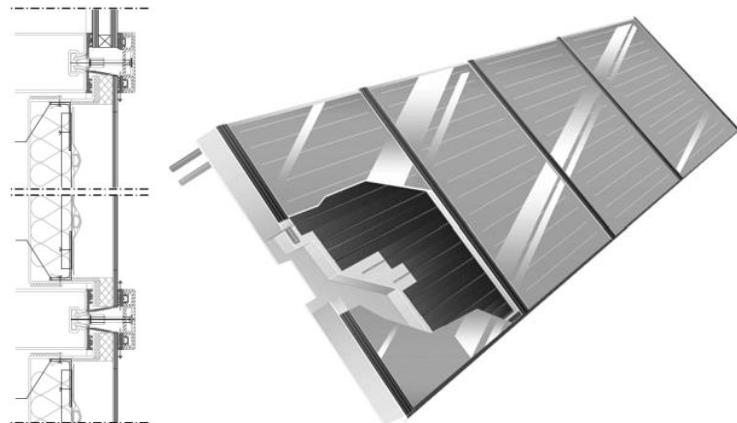
Rush classification: Level 3.

Visible, surface change

☒ New Build☐ Refurbishment☐ Other:**Type of BISTS:**

Hybrid

Function(s):

☒ Air heating☒ Water heating☐ Combi-system☐ Cooling/ventilation/shading☐ PV/T☐ linked to another
system☐ (e.g., heat pump)☐ Other:**Building element:**☒ Facade☒ Roof☐ Other: tracker system

1-cover rail; 2-glazing, 3-absorber, 4-thermal insulation, 5-back, 6-frame

BISTS characteristics:

Winkler VarioSol is a glazed flat plate system conceived for façades and is characterized by a very high level of freedom both in size and shape of the modules: 38 different standard formats up to 24 m² are proposed, and almost any customized shape can be provided at a reasonable extra cost. This flexibility comes from the absorber structure made of strips of small width and length cut to measure up to 5 m. Collectors are produced on order so that individual details, like jointing, can be made to measure. No dummy elements are available, and no choice is given on absorber colour/texture.

ST "Integrability" characteristics:

Multifunctional element	+
Shape & size flexibility	+
Glazing: surface texture choice	+/-
Absorber: surface texture choice	-
Absorber colour choice	-
Jointing options	+
Availability of dummies	-
Complete construction system	+/-

Stage of Development:Responsible:

<input type="radio"/>	Idea/Patent
<input type="radio"/>	Prototype
<input type="radio"/>	Demonstration
<input checked="" type="radio"/>	Integral building element
<input checked="" type="radio"/>	Commercially available

BISTS description and context

The structure of flat plate collectors (glazed and unglazed) is well adapted to replace parts of façade cladding. The insulation behind the absorber plate and the insulation of the building envelope can be merged to become one single element, or they can complement each other. The water tightness and insulation can be directly overtaken by the absorber plate for unglazed collectors, or by the front glazing for glazed ones.

Sources and references:

Solar energy & Architecture International Energy Agency - Solar Heating and Cooling Programme