

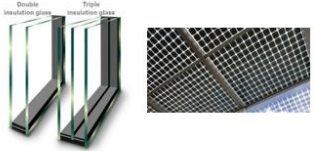
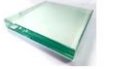
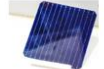




# Categorization of BIPV applications (overview)



- Many classification schemes for buildings and building components exist already. However, for building integrated photovoltaics, there is a large variety of application classifications and of terminology used by different stakeholders.
- The report presents a streamlined hierarchical approach as a reference for classifying BIPV on five levels: (1) application, (2) system, (3) module, (4) component, (5) material. Newly developed classification especially on system level.
- The report aims at encouraging an integrated perspective and an interdisciplinary approach to overcome some current obstacles that are still obstructing effective exchange of innovation and cooperation among all the stakeholders.



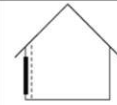

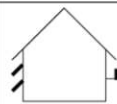
APPLICATION	SYSTEM	MODULE
<p>Example:</p>  <p>Category D: Non-sloped (vertically) mounted accessible from within the building</p>	<p>Example:</p>  <p>Curtain wall</p>	<p>Example:</p>  <p>Insulated semi-transparent pane (e.g. <b>requirements</b>= transparency, thermal insulation, acoustic insulation)</p>
COMPONENT		
		
transparent pane	Solar cell	
MATERIAL		
		
glass	c-Si	

Example façade system according to the defined hierarchical categorization

# BIPV application classification (level 1)



- Classification of different application types according to IEC 63092-1
- Combination of three criteria:
  - integrated into the building envelope: yes/no
  - accessible from within the building: yes/no
  - sloped: yes/no

<b>Category A:</b>	<b>Sloping, roof-integrated, not accessible from within the building</b> The BIPV modules are installed at a tilt angle between 0° and 75° from the horizontal plane [0°, 75°], see Fig.1, with another building product installed underneath (see NOTE).	
<b>Category B:</b>	<b>Sloping, roof-integrated, accessible from within the building</b> The BIPV modules are installed at a tilt angle between 0° and 75° from the horizontal plane [0°, 75°], see Fig.1.	
<b>Category C:</b>	<b>Non-sloping (vertically) envelope-integrated, not accessible from within the building</b> The BIPV modules are installed at a tilt angle between 75° and 90° from the horizontal plane [75°, 90°], see Fig. 1, with another building product installed behind (see NOTE).	
<b>Category D:</b>	<b>Non-sloping (vertically), envelope-integrated, accessible from within the building</b> The BIPV modules are installed at a tilt angle between 75° and 90° from the horizontal plane [75°, 90°], see Fig. 1.	
<b>Category E:</b>	<b>Externally-integrated, accessible or not accessible from within the building</b> The BIPV modules are installed to form an additional functional layer that provides a building requirement as defined in 4.1. E.g. <u>balcony</u> balustrades, <u>shutters</u> , <u>awnings</u> , <u>louvers</u> , brise soleil etc.	

# BIPV system classification (level 2)



- Three different main categories of BIPV systems
  - Roof
  - Façade
  - External integrated devices
- Definition and description of subcategories, including examples
- Glossary with translations of the terminology to several languages

