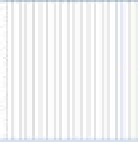


 BRE

European Survey to Identify 'Regulatory Barriers to Building with Wood'

For further information, please contact:

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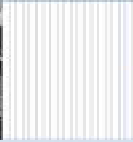
BRE

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This European survey has been designed to identify regulatory* barriers and differences for the use of wood in building construction across Europe. The survey only considers residential type buildings, such as:

- single family housing
- multi-storey buildings (e.g. hotels, motels, nursing homes and student accommodation)

We would be grateful if you could restrict your answers to these types of building only and consider typical national building practices. The form should only take a few minutes of your time for which we are grateful. The questionnaire is split into two main sections. For section 1 you should consider the following main question for all the elements of a building:

Main question: According to your national legislation, standards and building regulations may wood based products be used in the following applications?

To help visualise these elements, an example building is shown on the next page. There are three possible answers to the main question for each case:

1. Yes, with no limitations
2. Yes, with limitations (Please describe why)
3. No (Please describe why)

Section 2 asks specific questions relating to regulatory barriers

To help analyse responses to this questionnaire please provide the following information about yourself – this will not be used in any way outside of this survey.

Name _____
 Company _____
 Address _____

 Tel _____
 Email _____

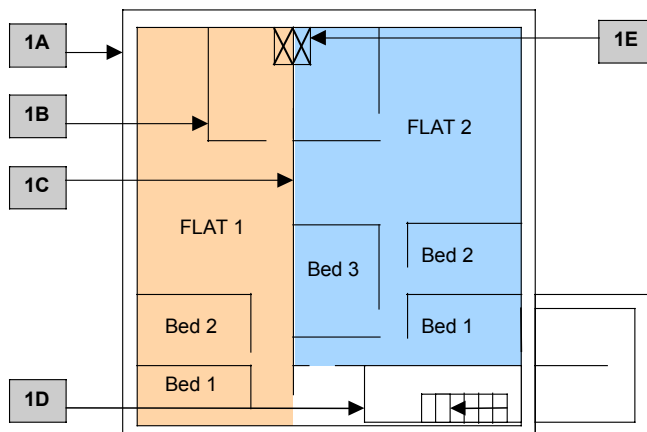
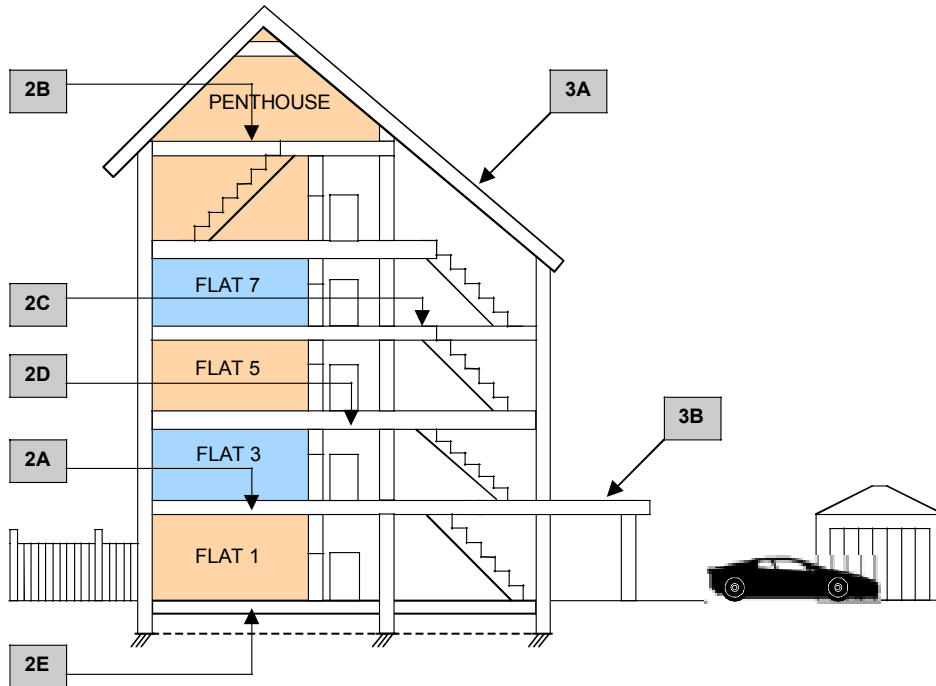
Which sector of the construction industry do you belong to?

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Clients |
| <input type="checkbox"/> | Planners (e.g. Building Authority) |
| <input type="checkbox"/> | Designers (e.g. Architects, Engineers) |
| <input type="checkbox"/> | Suppliers |
| <input type="checkbox"/> | Construction/Contractors |
| <input type="checkbox"/> | National Correspondents |

* Regulatory, i.e. Building Regulations, Codes and Standards, National Legislation.



OVERALL sketch of house



Plan view of the ground floor layout

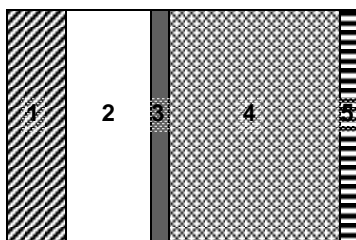
Please note this survey covers **BOTH** single family housing and multi-storey residential buildings.



Section 1 – Building elements

1A External Walls

Plan cross section view



Components:

- 1 Cladding zone
- 2 Cladding zone (barriers?)
- 3 Sheathing zone
- 4 Structural framing zone (with insulation)
- 5 Internal wall lining zone

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---|
| 1 | 2 | 3 | 4 | 5 | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes, with no limitations |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes, with limitations (Please describe below) |

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | No (Please describe why not below) |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------------------|

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

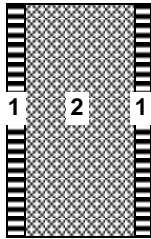
Do **you** consider wood-based products suitable for these applications?

- | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Yes |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | No |



1B Internal Walls

Plan cross section view



Components:

- 1 Wall Lining zone
- 2 Structural framing zone (with insulation)

Load bearing

1	2
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Non-Loadbearing

1	2
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

No (Please describe why not below)

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

Yes

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

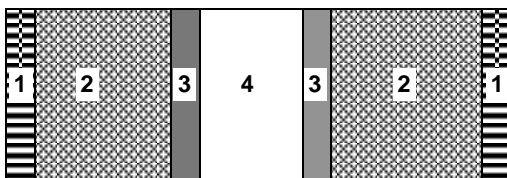
<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

No



1C Party Walls

Plan cross section view



Components:

1. Wall lining zone
2. Structural framing zone (with insulation)
3. Sheathing zone
4. Cavity zone (barriers?)

1 2 3 4

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

No (Please describe why not below)

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

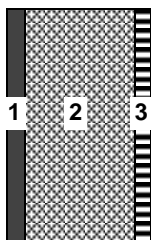
Yes

No



1D Escape Routes

Plan cross section view



Components:

- 1 External wall lining zone
- 2 Structural framing zone (with insulation)
- 3 Internal wall lining zone

1 2 3

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

No (Please describe why not below)

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

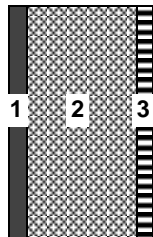
Yes

No



1E Laundry and refuse chutes

Plan cross section view



Components:

- 1 External wall lining zone
- 2 Structural framing zone (with insulation)
- 3 Internal wall lining zone

1	2	3	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with no limitations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No (Please describe why not below)
--------------------------	--------------------------	--------------------------	------------------------------------

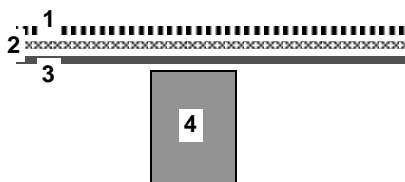
Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No



2A Compartment floors (party)



Components:

- 1 Flooring zone
- 2 Acoustic zone
- 3 Structural decking zone
- 4 Structural (loadbearing) zone
- 5 Ceiling zone

5

1 2 3 4 5
 Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
 (if possible please also provide a reference number)

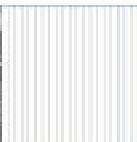
No (Please describe why not below)

Note: Please describe regulatory limitations only
 (if possible please also provide a reference number)

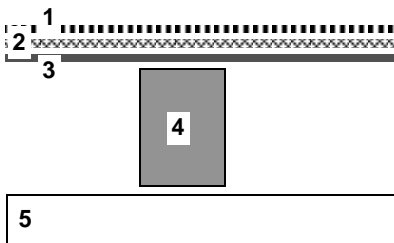
Do **you** consider wood-based products suitable for these applications?

Yes

No



2C Escape Routes



Components:

- 1 Flooring zone
- 2 Acoustic zone
- 3 Structural decking zone
- 4 Structural (loadbearing) zone
- 5 Ceiling zone

1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with no limitations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No (Please describe why not below)
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	------------------------------------

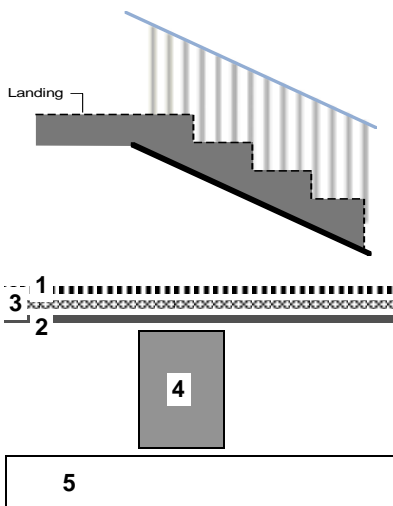
Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No



2D Landings



Components:

- 1 Flooring zone
- 2 Acoustic zone
- 3 Structural decking zone
- 4 Structural (loadbearing) zone
- 5 Ceiling zone

1	2	3	4	5	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with no limitations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes, with limitations (Please describe below)

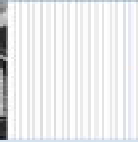
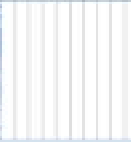
Describe the main limitations by quoting component number (if possible please also provide a reference number)

No (Please describe why not below)

Note: Please describe regulatory limitations only (if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Yes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No



2E **Suspended ground floors**

Do your regulations permit timber to be used as ground floors?

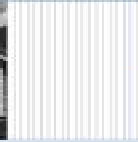
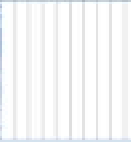
Yes

No

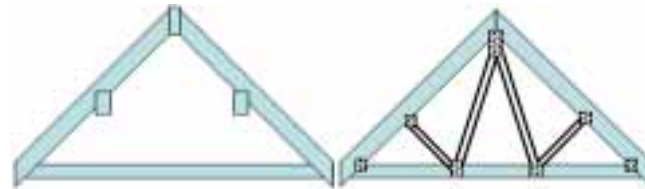
Do **you** consider wood-based products suitable for these applications?

Yes

No



3A Pitched roof elements



1 Habitable

2 Non-Habitable

1

2

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting element number
(if possible please also provide a reference number)

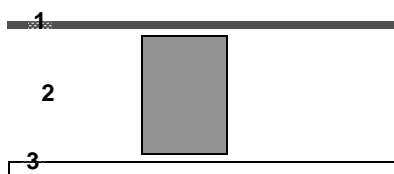
No (Please describe why not below)

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

Yes

No


3B Flat roofs


Components:

1. Deck zone
2. Structural (loadbearing) zone
3. Ceiling zone

1 2 3 Yes, with no limitations

1 2 3 Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

1 2 3 No (Please describe why not below)

Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

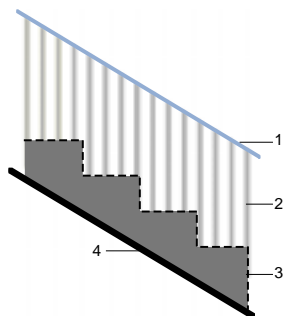
Do **you** consider wood-based products suitable for these applications?

Yes No

Yes No



4 Stairs



Components:

- 1 Handrail/balustrade
- 2 Stair finish
- 3 Structure
- 4 Back surface zone

1	2	3	4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting component number
(if possible please also provide a reference number)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------

No (Please describe why not below)

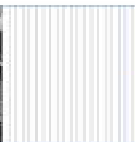
Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Do **you** consider wood-based products suitable for these applications?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Yes

No



5 Joinery

Doors



External

Compartment

Internal

Windows

Cabinets

Skirting/architraves

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting type of joinery from above
(if possible please also provide a reference number)

No (Please describe why not below)

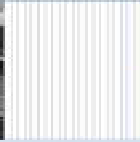
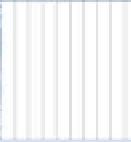
Note: Please describe regulatory limitations only
(if possible please also provide a reference number)

Any other?

Do **you** consider wood-based products suitable for these applications?

Yes

No



6 Outdoor structures

Small garden constructions, ie sheds, fences, summer houses

Decking

Carports

Garages

Conservatories (Winter gardens)

Walkways

Yes, with no limitations

Yes, with limitations (Please describe below)

Describe the main limitations by quoting the type of application from above (if possible please also provide a reference number)

No (Please describe why not below)

Note: Please describe regulatory limitations only (if possible please also provide a reference number)

Any other?

Do **you** consider wood-based products suitable for these applications?

Yes

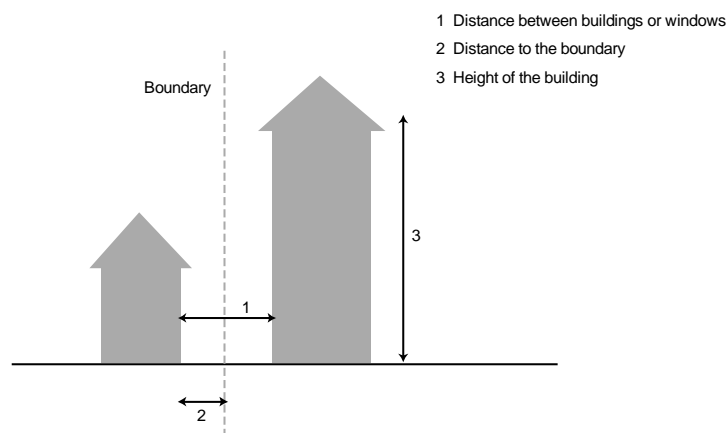
No



Section 2 – General questions

These are some additional technical questions – please feel free to leave certain sections out.

- 1 National regulations may limit the use of wood-based products for buildings close to boundaries and adjacent buildings. The main issues have been highlighted in the diagram below.



Please indicate if there are regulatory barriers limiting the use of wood products for the following building elements.

	If yes, which issues				
	Yes	No	1	2	3
Structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cladding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Windows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 2 Do you have any regulations considering the disproportional collapse/progression of multi-storey buildings

No

Yes

Number of storeys _____

- 3 Please quote the required u-value in W/m^2K for external walls and roofs.

Do not know

A External wall _____ W/m^2K

B Roof _____ W/m^2K



- 4 Please quote the required acoustic values for:

	Value		Unit (e.g. dB)
	Sound insulation	Impact insulation	
Internal wall	_____	(not applicable)	_____
Internal floor	_____	_____	_____
Party wall	_____	(not applicable)	_____
Party floor	_____	_____	_____
Façade	_____	(not applicable)	_____

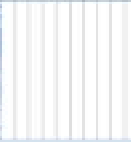
- 5 Please tick which timber preservatives are required by regulations for the following situations. Note more than one treatment may be suitable.

	CCA	Other metallic based	Boron	Other Solventborn	None	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soleplate
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Groundfloor
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	External single wall
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	External double wall
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roofs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Internal walls

If there are any other situations where regulations require timber to be preservative treated, please describe:

- 6 Do you feel there is enough guidance specifically for timber structures?

- Yes
- No



7 Are you required by legislation to obtain your timber from independently certified, well-managed forests?

a) for private clients

 Yes No

b) for public clients

 Yes No

If No, do you think this will be introduced by National legislation in the future?

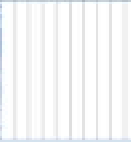
 0 – 5 years 5 to 10 years 10 to 20 years Never

8 Are you familiar with Eurocodes?

 Yes Yes, some No

9 Do you use Eurocodes?

 Yes No



10 Are there any regulatory barriers for the use of these timber products

Please specify



LVL

 Yes
 No



Parallam

 Yes
 No



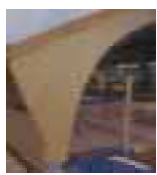
Pressed Metal
Beam

 Yes
 No



I Beams

 Yes
 No



Glulam

 Yes
 No



- 11 Do you consider other regulatory barriers. Please note that more than one answer may be suitable. Please rank the following 1 to 7, 1 being the most important.

Institutional

- Educational/Training and Skills
- Safety
- LCA (Life Cycle Analysis) issues
- Sustainability issues
- Planning
- Voluntary Industrial Standards
- Networking within and with wood and construction industry

Technical

- Durability
- Availability
- Construction process
- Shortage of professionals and their knowledge
- Approvals
- Lack of interaction with other materials
- Technical back-up

Economic

- Taxes
- Costing and Pricing
- Lack of common methodology (e.g. in manufacturing)
- Risks
- Insurance Policies
- Supply chain
- Investments by all sectors

- Perception** (Please note perceptual barriers are being dealt with by another working group)

Others

Please specify
