

Wall-ACE

Deliverable

D7.5: Wall-ACE Workshop I

WP	7	Dissemination and exploitation
Task	7.1	Dissemination Activities

Dissemination level¹	PU	Due delivery date	31 December 2017
Nature²	R	Actual delivery date	24 January 2018

Lead beneficiary	USTUTT
Contributing beneficiaries	all

Document Version	Date	Author	Comments³
V0.1	24/01/2018	Laurence LAPÔTRE	Creation
V0.2		Juergen FRICK	Modification
V0.3		Brice FIORENTINO	Validation
V finale	26/01/2018	Sergei KRUPSKI	Validation

¹ Dissemination level: **PU** = Public, **PP** = Restricted to other programme participants (including the Commission services), **RE** = Restricted to a group specified by the consortium (including the Commission services), **CO** = Confidential, only for members of the consortium (including the Commission services)

² Nature of the deliverable: **R** = Report, Document, **DEM** = Demonstrator, Prototype, pilot, **DEC** = Websites, patent filings, **O** = Other

³ Creation, modification, final version for evaluation, revised version following evaluation, final

Deliverable abstract

This deliverable is part of the Subtask 7.1.5: Wall-ACE workshop Fairs.

A joint workshop gathering the H2020 projects Wall-ACE, HOMESKIN (organizer of this event), INNOVIP, GELCLAD and EENSULATE has been organized on 23 January 2018 in Brussels. This workshop was a public workshop open to all stakeholders.

Deliverable Review

Reviewer #1: Brice Fiorentino			Reviewer #2: Sergei Krupski		
Answer	Comments	Type*	Answer	Comments	Type*

Is the deliverable in accordance with

the Description of Action?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
the international State of the Art?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a

Is the quality of the deliverable in a status

that allows it to be sent to European Commission?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
that needs improvement of the writing by the originator of the deliverable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a
that needs further work by the Partners responsible for the deliverable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> M <input type="checkbox"/> m <input type="checkbox"/> a

* Type of comments: M = Major comment; m = minor comment; a = advice

1. Overview

In order to share results, best practice, as well as technical and business issues, a workshop on novel energy efficient envelopes took place on 23 January 2018 in Brussels.

Together with Wall-ACE, four other H2020 projects on this thematic area participated to this event:

- HOMEKIN, developing novel aerogel-based composite insulation systems,
- INNOVIP, improving the thermal performance of VIP over the entire lifetime,
- GELCLAD, developing highly efficient cladding eco-panels with improved nano-insulation properties,
- EENSULATE, developing innovative lightweight, highly energy efficient cost effective curtain components for wall façades.

All stakeholders (industry (via ECTP), research and experts) were invited to this public event. Overall 40 persons attended the workshop.

The programme is listed below:

1. Overview of projects
2. Technical performance for certification (thermal resistance, fire safety, moisture, acoustic, etc.)
3. Go-to-market barriers



This mid-term workshop ensured Wall-ACE not only disseminated its interim results to this community, but also learnt and shared best practice from progress in the development of insulation materials and update knowledge regarding industry pull.

All the presentations will be shared with the participants and will be available at the HomeSkin website (<https://homeskin.net/>). The Wall-ACE ones are appended on next pages. Some pictures of the workshop are presented below:



2. Wall-ACE slides

Overview of the project

Wall-ACE

Novel wall insulation systems

Dr. Michael Fookien

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Project objectives

- Wall-ACE will develop a consistent package of **new advanced sustainable insulation products and systems**, which are key enablers to energy and CO₂ emissions savings at European level.
- The **HONEST** (High performance Optimized Nanomaterial Energy efficient SysTem) package is a **"modular toolbox system"** providing a set of complementary solutions that will address most of the complex challenges raised by thermal renovation as well as new construction.
- The HONEST package includes: **insulating thermal coating-finishing with low emissivity, internal high performance insulating plaster, insulating interior patching filler, external high performance insulating render, and insulation clay bricks**.
- These products/systems will provide top insulation performance as well as improved comfort, indoor air quality, fire safety, durability and sustainability.
- They will strengthen the industrial leadership and competitiveness of Europe in the construction sector on a global level.

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Major steps

- These highly efficient products are achieved through the synergy between the different members of the consortium through combining the high performance, sustainable, and advanced nanotechnology of the **silica aerogel**, with existing, already approved, efficient products.
- The **aerogel materials structure properties and cost** will be optimised.
- The process of the five high efficient mineral insulation systems will be **scaled-up** to test replicability, processability and reach **industrial scale**.
- Then, these five systems will be fully **characterised** including an LCA assessment, along with **certification and standardization** activities.
- In addition, the project sets a major focus on the **"go to market"** validation of the five products. Business planning and a field market test will be carried out, along with performance assessments on real buildings, and training and communication tools design, in order to maximize use potentials and foster a wide replication throughout Europe.

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Project consortium



8 european partners
5 key manufacturers

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4




Key manufacturers



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5






Demonstration sites

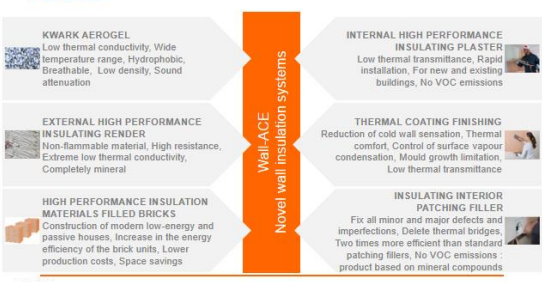


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Products



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Project financing



- Grant Agreement number: 723574
- Project acronym: Wall-ACE
- Project title: Wall insulation novel nanomaterials efficient systems
- Project duration: 1 October 2016 – 30 September 2019
- Topic: Highly efficient insulation materials with improved properties
- Grant amount: EUR 4,289,785.00
- Estimated eligible costs: EUR 6,254,915.00
- Project coordinator: Quick-Mix
- Website: <https://www.wall-ace.eu/>

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3. Conclusions

During the discussion the following points were raised which give an overview of the challenges for the participating projects.

- Some of the new products need development of measurement and assessment methods (e.g. due to the very low thickness in the case of vacuum insulation panels (VIP), even low uncertainty in thickness measurements has a great effect on thermal conductance).
- The range of assessment methods for the new products last from nearly available standards until complete unavailable methods, where new EADs must be developed to get an ETA or CE marking.
- Material stability during mixing and extrusion processes is a great challenge to all aerogel products.
- Some of the new products will be especially valuable for the retrofitting market, one of the great challenges in future to reduce greenhouse gas emissions from the building sector.
- For all new products it will be a great challenge to reach cost levels which are competitive to existing products.