

## LEED STATEMENT

# ACOUSTIC PLASTER

## LEED V4 CERTIFICATE CONTRIBUTION

LEED (Leadership in Energy and Environmental Design) is a global green building certification program developed by the US Green Building Council. Achieving LEED certification requires projects to satisfy all the prerequisite and desired credit requirements.

The performance of the project when measured against these criteria determine the certification status of Silver, Gold, or Platinum.

Armourcoat is committed to sustainability across all aspects of our business. We strive to formulate all our products without VOC's or solvents and utilize recycled materials as widely as possible.

## ENERGY AND ATMOSPHERE (EA)

### OPTIMIZED ENERGY PERFORMANCE

#### EA Credit (1-20 points)

Intent - To achieve increased energy performance and to reduce the environmental impact associated with excessive energy use and reduce stratospheric ozone depletion.

The Armourcoat recycled glass wool panels and board coating provide excellent thermal insulation which contributes to the reduction of heating and cooling energy used.

Armourcoat panels provide the following U values:

28mm system – 1.35 w/m<sup>2</sup> K

48mm system - 0.72 W/m<sup>2</sup> K



## MATERIALS AND RESOURCES (MR)

Intent - to consider the entire life cycle of the building from extraction and manufacturing to transport, operations, maintenance and eventually the end of life with the aim of minimizing the total embodied energy within a building.

### ENVIRONMENTAL PRODUCT DECLARATIONS

#### MR Credit (1-2 points)

Intent - To encourage the use of products and materials for which life- cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts.

Application – Armourcoat has undertaken a full life cycle analysis for the Acoustic plaster and has independently verified and published EPD's for the complete system.

### SOURCING OF RAW MATERIALS

#### MR Credit (1-2 points)

Intent - To encourage the use of products and materials for which life- cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts.

Application - Armourcoat has undertaken a full life cycle analysis for the Acoustic plaster and has independently verified and published EPD's for the complete system.

The glass wool panels are made from general recycled glass and the board coating and acoustic undercoat contain more than 90% post-consumer recycled plate glass.

The Armourcoat acoustic topcoat contains more than 94% pre-consumer recycled marble and has an organic content of less than 3%.

### MATERIAL INGREDIENTS

#### MR Credit (1-2 points)

Intent - To encourage the use of products and materials for which life- cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts.

Application - Armourcoat discloses all chemical product ingredients in the system and has HPD Version 2.2 (health Product Declarations) that confirm the absence of harmful substances.

All materials in the Armourcoat Acoustic System have been screened against the Living building Challenge (LBC) red list materials as part of the HPD generation. Ingredients screened down to 0.1% (1000 ppm).

## CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT

### MR Credit (1-2 points)

Intent - To reduce construction and demolition waste disposed of in landfills and incineration facilities through waste prevention and by reusing, recovering, and recycling materials and conserving resources for future generations.

Application - In a typical installation less than 2% of the panels are discarded due to small leftover pieces as the small offcuts can be used in a patchwork and then overcoated with the undercoat to provide a flat surface for the topcoat.

Panel scraps are accepted in mixed glass recycling facilities as both the panel and the board coating are more than 90% recycled glass.

Undercoat granules are supplied in recycled paper sacks rather than buckets and these can again be recycled into wastepaper.

The plastic pails for the topcoat can be easily cleaned and recycled as plastic waste.

Any unused materials other than topcoat that has been tinted to a non-standard colour are saved for use on following projects.

## INDOOR ENVIRONMENTAL QUALITY (EQ)

Intent - To contribute to the comfort and well-being of all building occupants by establishing minimum standards for indoor air quality.

### LOW EMITTING MATERIAL

#### EQ Credit (1-3points)

Intent - to reduce the concentration of chemical contaminants that can damage air quality and the environment and to protect health, productivity and comfort of installers and building occupants.

Application - Armourcoat topcoat plaster was tested for VOC content to ISO 11890-2 and achieve <1g/l which is below the limit of detection.

The Armourcoat Acoustic system was tested for Indoor air quality Emissions by Eurofins and achieved a pass.

Armourcoat Acoustic system was tested in April 2021 following the requirements of CDPH Standard Method and is compliant with CA section 01350 and CDPH standard V1.2.



## THERMAL COMFORT

### EQ Credit (1 point)

Intent - To promote occupants' productivity, comfort and wellbeing by providing thermal comfort.

Application - The Armourcoat recycled glass wool panels and board coating provide excellent thermal insulation which contributes to the reduction of heating and cooling energy used and affording occupants greater thermal comfort in a conditioned space with lower heating and cooling energy use.

Armourcoat panels provide the following U values:

28mm system – 1.35 w/m<sup>2</sup> K

48mm system - 0.72 W/m<sup>2</sup> K

## INTERIOR LIGHTING

### EQ Credit (1-2 points)

Intent - To promote occupants' productivity, comfort, and wellbeing by providing high quality lighting.

Application - The Armourcoat acoustic topcoat made from fine recycled white marble granules is an excellent reflective white surface which contributes to the reduction in lighting energy consumption. L value 90 (LAB).

## ACOUSTIC PERFORMANCE

### EQ Credit (1-2 points)

Intent - To promote occupants' productivity, comfort and wellbeing by reducing reverberation through effective acoustic design.

Application - Armourcoat Acoustic Plaster System will significantly reduce the reverberation time across a wide range of frequencies due to its outstanding sound absorption qualities.

Tested to EN ISO 354 and ASTM C423-17:

Armourcoat 28mm system

NRC - 0.85

Alpha W - 0.80

SAA - 0.82

Armourcoat 48mm System

NRC - 0.95

Alpha W - 0.95

SAA - 0.92