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PanelTack™, Wall Panel & Façade Cladding System and Insulation Boards

FACTSHEET



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GLOBAL LEADER IN ADHESIVE TECHNOLOGIES

Bostik is one of the largest adhesive and sealant companies. Worldwide, we employ some 6,000 people in 50 countries across five continents. Our customers come from diverse markets, most notably the industrial manufacturing, construction and consumer sectors.

SMART INNOVATIONS

Our smart identity is underpinned by innovation. We pursue innovation vigorously, applying the latest technological advances to developing 'smart' adhesives. Our archives are laden with examples of Bostik technologies that have disrupted markets - from potato starch-based wallpaper paste to elastic attachment adhesive for diapers.

Today, our commitment to innovation is as strong as ever. We innovate with our customers through a global R&D network, comprising three international Smart Technology Centres and 11 regional centres. And we differentiate our business through this investment. That's why in 2014, 15% of Bostik sales came from products launched in the previous three years.

GENERAL INFORMATION

Bostik has been a leader in the field of wall cladding and panel bonding with the PanelTack™ system for more than 30 years, with proven performance to highlight our knowledge, experience, and innovation on a global scale.

Wall cladding has gained popularity in recent years for its durability, energy-saving benefits, the ease, speed and cleanliness of installation, and for a seamless aesthetic look. The adhesive system prevents the panels from sagging under their own weight, and they absorb cyclical expansion and contraction due to environmental changes, such as wind, temperature, and humidity. Wall panel and façade cladding materials such as gauged porcelain tile panels, high-pressure laminate (HPL), aluminium composite materials (ACM), pressed mineral wool (PMW), fiber cement boards (FCB), porcelain, ceramic, concrete, porous substrates and other materials, to name just a few, are able to absorb wind loads and ensure a lasting bond under extreme conditions.

The complete PanelTack™ System includes Primer PanelTack™, FoamTape™, PanelTack HM™ and other PanelTack™ primers.

For bonding insulating façade panels to walls, Bostik is offering an unique set of products that are ETA 004:2000 tested and certified, meaning that these Bostik P575 PANELTACK EIFS PRO B3, P775 PANELTACK EIFS PRO B2 and P975 PANELTACK EIFS PRO B1 can be used as insulation board adhesive without the use of mechanical fixings.





WHY CHOOSE A WALL PANEL OR FAÇADE CLADDING SYSTEM

With its vast design capabilities and reduced energy consumption, wall panel and façade cladding is prevalent in large, state-of-the-art applications, such as in the new construction of hospitals, schools, stadiums and various other commercial and residential buildings. The benefits of a façade system are also ideal for retrofitting over existing building exteriors, as well as for smaller or more decorative projects that can complement an existing design or construction. With panels in an extensive range of sizes and materials that can imitate or complement the appearance of numerous building aesthetics, the overall look of any building can change dramatically.

BENEFITS TO A BONDED WALL PANEL OR FAÇADE CLADDING SYSTEM

- A discreet attachment method for an aesthetically pleasing look
- Energy-efficient cladding systems have higher thermal resistance and fewer thermal breaks
- The elastic adhesive is more resistant to vibrations and tremors
- No cold bridges
- A bond that is able to absorb pressures and tensile forces due to wind
- Favourable stress distribution
- No unsightly screws that eventually lead to dirty stripes
- No electricity required on site
- No dust and noise caused by drilling and fastening
- No weakening of the panel (remains whole with no drilling required)
- Thinner wall panels can be used
- Quick and easy adhering method
- Internal and external use

WHY CHOOSE A WALL WITH INSULATION PANELS

ETICS (External Thermal Insulation Composite System) or EIFS (External Insulation Façade Systems), is a rapidly increasing in popularity and square meterage building method for energy efficient buildings. Already more than 2,000,000,000 m² of ETICS have already been installed all over Europe, and growing fast. ETICS, can reduce when properly installed, reduces thermal transmission through walls and helps to reduce the costs for heating and cooling by 50%.

In combination with the Bostik Professional Portfolio of products for Energy Saving & Airtight, you have a winning combination to reduce Co₂, energy and costs.

BENEFITS TO THE BOSTIK FOAM ADHESIVES FOR EXTERNAL INSULATION FAÇADE SYSTEM

- **Cash is King I:** You can save +20% at your purchase costs for the same square meters compared to the traditional EIFS bonding materials
- **Cash is King II:** You can save +40% on labour and installation costs, compared to the traditional EIFS bonding methods
- Health wise, one can P575, P775 and P975 equals similar square meterage of application but comes with a weight saving of 98% per single pack!
- ETA 004:2000 tested and certified
- Energy-efficient bonding system, higher thermal resistance compared to mortar and dowels.
- Reduction of transportation costs and Co₂ expels
- Far less storage space needed in todays crowded building sites
- No water and mixing on building site
- No need for electricity
- Environmentally friendlier than traditional cement mortars
- EC1 Plus and A+ certified



FIRE RESISTANCE AND FIRE SAFETY (I)

For PanelTack™ Wall Panel & Façade Cladding Systems:

Fire resistance is based on a construction's influence on the start of and contribution to a fire. The European classification according to EN 13501-1 distinguishes seven main classifications (A1, A2, B, C, D, E and F), with the following two additions:

- "Class s" for smoke development (s1, s2, and s3, where s1 is the highest sub-classification)
- "Class d" for the formation of burning drops and particles (d0, d1, and d2, where d0 is the highest sub-classification)

Every component of a construction determines the result, such as the panels, the support construction, the installation method, and any insulation material used. With regards to the support structure construction, aluminium is non-flammable with a melting point of about 650°C (1.202°F). The most determining factor, however, is the panel itself. Mineral wool and porcelain tile tends to be the preferred material with a class A1 or A2 rating. Bostik has conducted various fire tests showing that, regarding fire safety (fire classification according to EN 13501-1), legal requirements can be met.

FIRE RESISTANCE AND FIRE SAFETY (II)

For PanelTack™ External Insulation Façade Systems:

The determination of reaction to fire of the ETICS is based on testing of "the worst case" - the most critical configuration in sense of reaction to fire. According to the rules described further in the text, the classification obtained on the most critical ETICS configuration is valid for all configurations having better performance in sense of reaction to fire.

The influence of the type of adhesive having an organic content of equal to or less than 15% (related to the mass in dry condition) is assumed to be negligible. Only the amount of organic content is considered important. Therefore, an adhesive with the highest amount of organic content should be used for preparing the test specimens applied at the maximum thickness. The influence of adhesives having an organic

content of more than 15 % cannot be assumed to be negligible. Therefore, each type of adhesive with a different composition shall be tested by selecting the variant with the highest organic content.

Fields of application:

- Bostik PANELTACK EIFS PRO B3 for all ETICS/EIFS bonding applications till 10 meters building height
- Bostik P975 PANELTACK EIFS PRO B1 mandatory for all ETICS/EIFS bonding applications above 10 meters building height, without mandatory below the 10 meters building height.
- Bostik P775 PANELTACK EIFS PRO B2, equals as P575 but then for DACH area

Fire resistance is the ability of a building system to meet the requirements relating to fire stability, flame resistance, and thermal insulation for a certain period of time. The cladding/façade panel determines the overall performance of the PanelTack™ system with regard to fire resistance.