INSTALL FIRE PROTECTION

ArmaProtect® Systems

New integrated fire protection systems to securely seal off service penetrations of pipes and cables. Whether in rigid floors, rigid or flexible walls, our new ArmaProtect systems ensure effective and reliable fire protection for almost all structural elements in buildings. Discover more about using our systems.

wwwarmacell.com
ARMAPROTECT FIRE PROTECTION SYSTEMS

The additional safety Armacell solutions provide to customers help us make a difference around the world, every day and for all of us.

By mitigating the fire and smoke risk, our systems improve visibility, thus extending the time to safely evacuate in the event of a fire. ArmaProtect. Installed fire protection.

Cutting off the path of the fire
In a fire, service equipment has a significant impact on safety in buildings. Pipes, ducts and electric cables penetrate separating building elements and thus form a path via which flames and smoke can spread. Passive fire protection systems are built-in components which compartmentalise a building through the use of fire barriers (fire-rated walls, floors and ceilings).

Effective and reliable fire protection
ArmaProtect systems facilitate your fire protection project. We provide you with a versatile range for nearly all types of pipes and structural elements. Properly installed, our integrated systems ensure that wall and ceiling penetrations reliably pass building inspections thus contributing to a smooth construction process.

ARMAFLEX® PROTECT
Flexible fire protection
// Unique single solution for hot and cold applications
// Effective thermal insulation, reliable condensation control and structure-borne noise reduction
// Quick and easy installation
// Suitable for ceilings, rigid walls and lightweight walls
// Can be used in combination with all ArmaFlex products

ARMAPROTECT WRAP
Highly intumescent wrap
// Halogen-free, non-toxic wrap which expands by up to 25 times of its original volume
// To be used as a system with ArmaProtect Board for insulated plastic and metal pipes
// Standalone solution for non-insulated plastic pipes
// Supplied in convenient 2 mm thick, 25 m long rolls
// Also available as pre-cut ready-to-use strips

ARMAPROTECT BOARD
Ablative-coated mineral fibre board
// An integral component of ArmaProtect systems
// Suitable for larger openings in walls with additional supports
// Can be used for a wide range of electrical service penetrations
// Acoustic properties, air permeable
Non-insulated metal pipes
Non-insulated plastic pipes
Insulated metal pipes
Insulated plastic pipes
Cables
Insulated metal pipes (floor penetration)

**ARMAPROTECT SEAL**  
Fire-resistant sealant  
- An integral component for ArmaProtect Wrap and/or ArmaProtect Board applications  
- Provides fire protection for non-insulated metal pipe, non-insulated PVC-U pipe, and cable/cable tray penetrations  
- Reliable acoustic insulation properties  
- Halogen-free, resists fungi and vermin

**ARMAPROTECT SEAL X**  
Highly intumescent graphite sealant  
- Easy to use even in tight spaces  
- Suitable for ArmaFlex-insulated metal pipes and various non-insulated plastic pipe penetrations  
- To be used as a system with ArmaProtect Board for non-insulated Uponor MLC pipe penetrations  
- Paintable

**ARMAPROTECT COLLAR**  
Intumescent collar  
- Fire resistances of up to EI 240 (EN 13501-2) for non-insulated plastic pipes  
- Highly intumescent  
- Ready to use and easy to apply  
- Available from diameters 32/42 to 250 mm

**ARMAPROTECT 1000-HS**  
High-strength fire-resistant mortar  
- Load-bearing fire protection mortar for floor penetrations  
- Easy to use, pourable or trowel-grade mix options  
- Non-shrinking and fast-setting formula  
- Excellent workability
## ARMAPROTECT SYSTEMS AT A GLANCE

Passive fire protection is a key component of any fire safety strategy. Depending on the pipe material and structural element, you can choose between different configurations which constitute a reliable fire stop. All solutions and systems have been tested in accordance with the strict requirements of the European Technical Assessment (ETA).

<table>
<thead>
<tr>
<th>Metal pipes</th>
<th>Plastic pipes</th>
<th>Composite pipes</th>
<th>Electrical apertures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steel</strong></td>
<td><strong>PE</strong></td>
<td><strong>ABS</strong></td>
<td><strong>Alpex FSO Profi L</strong></td>
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<tr>
<td>No</td>
<td>No</td>
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<tr>
<td>Wall</td>
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<td>Floor</td>
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<tr>
<td><strong>Steel</strong></td>
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<td>Floor</td>
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<tr>
<td><strong>Copper</strong></td>
<td><strong>PVC</strong></td>
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<tr>
<td><strong>Notes:</strong></td>
<td><strong>ArmaFlex Protect</strong></td>
<td><strong>ArmaProtect Board</strong></td>
<td><strong>ArmaProtect Seal</strong></td>
</tr>
<tr>
<td>(a) ArmaFlex Protect acts as both a thermal insulation and passive fire protection solution</td>
<td>(b) with ArmaProtect Seal</td>
<td>(d) for all applications with ArmaProtect Board, ArmaProtect Seal must be used to seal all surfaces</td>
<td>(e) only with non-combustible insulation</td>
</tr>
</tbody>
</table>

### About Armacell

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell’s products significantly contribute to global energy efficiency making a difference around the world every day. With 3,135 employees and 24 production plants in 16 countries, the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology. For more information, please visit: www.armacell.com

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