Technical Data Sheet

NS Putty and NS Putty Pad

UIC of product-type:

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DEVELOP
MANUFACTURE
PROTECT

FIRE STOPPING & COMPARTMENTATION SYSTEMS

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Product Overview

Technical Description of NS Putty

NS Putty is a solvent free putty for fire barriers up to 240 minutes. It is designed as a joint filler and sealer for use in penetration seals. Tested to EN1366-3 on C1, C2 and D1 Type Cables, Cable Trays and Metallic Pipes.

NS Putty is designed to remain flexible allowing for thermal and mechanical movement of services around complex and irregular shapes through walls or floors.

Technical Description of NS Putty Pads

NS Putty Pads are pre-cut intumescent pads designed for easy application around single and double electrical socket installations. Tested in accordance with EN1366-3:2009, NS Putty Pads provide up to 2 hours fire resistance.

Acoustic rated to BS EN ISO 10140/3. Tested for air permeability to EN13141-1 Ventilation for buildings.

Intended Use

The specific elements of construction that the system NS Putty and NS Putty Pads may be used to provide a penetration seal in, are as follows:

- Fire resistance testing to EN 1366-3 EI 120, and BS 476 pt 20/22 240mins.
- Fire Classification to EN 13501-2.
- Certifire 3rd Party Accreditation CF 515.
- Acoustic Isolation to EN 10140 to 65dB.
- Fire resistance tested in flexible walls, rigid walls and floors.
- Tested in large service openings up to 250 x 150mm.
- Tested with Metallic Pipes, Cables, Cable Bunches, Cable Trays and Cable Ladders.

Key Product Points

- Causes no known effects to plastic pipes, plastic cables, sheathing or metallic components.
- Contributes to Green Building.
- Non-setting compound.
- Highly flexible and water resistant.
- Halogen free, resists fungi and vermin.
- Maintains a fire and smoke barrier around sockets in flexible wall systems.
- High tack adhesion, pliable and mouldable with excellent self bonding properties.
- Preformed shape to fit most common socket boxes.
- Shelf Life 60 months.

Product Technical Data

Description for NS Putty Pads	Result	Test Standard
Colour	Green	
Activation	250°C	
Density	1.55-1.6 g/cm^3	ISO 2811-1:2011
Thickness	4mm	
Fire Resistance	Up to 120 minutes	EN 1366-3: 2009
Expected Shelf Life	12 months	Store in dry conditions unopened

Description for NS Putty	Result	Test Standard
Packaging	1kg Pail & 20kg Pail	
Colour	White, Red, Grey or Brown	
Density	1.55 g/cm^3	ISO 2811-1:2011
pH Value	8.2	
Solids	82%	
Shore A Hardness	50	
Application temperature	+5°C to +45°C	
Water Resistance	Good when fully cured	
U.V Resistance	Good	
Joint Movement	±10%	
Fire Resistance	EI 120 & 240 mins	EN 1366-3, BS476
Fire Classification	EN 13501-2	
Expected Shelf Life	12 months	Store in dry conditions unopened

Installation for NS Putty

Ensure that the aperture and services in question are tested with NS Putty and NS Putty Pads, and the site conditions are within the application specification. An annular space needs to be present around the service to allow sufficient installation depth.

All services and apertures need to be clean and clear of all dust and loose particles. The aperture temperature needs to at 5°C or above at time of installation.

Upon installation make sure that you install the NS Putty to the recommended installation method for the service you are installing around.

Thumb in NS Putty to the surrounding of the service, to make a compact seal around the service with the full depth intended.

Installation for NS Putty Pads

Fold the pad to the shape of the box pressing the edges together.

Press home in and around the box, make a small hole to pull the cables through and seal up firmly.

Work in and around the corners to ensure complete coverage of the socket box.

For external application over the socket box press hard against the partition and make sure there is a good tight fit using pressure.

For internal application trim back around the box to suit and make sure that there is a good seal around any cables before fitting the face of the socket.

Can also be installed over the back of the Socket Box.

Performance Data - Walls

Substrates

The walls shall be a minimum of **100/ 125/ 135mm thick**. Drywalls shall comprise a minimum of 2 layers of 'Type F' Gypsum board on both faces, with minimum 50mm studs. Masonary / Concrete walls shall have a minimum density for concrete or brick of 670 - 780kg/m³ and for aerated concrete blocks of 600kg/m³. All walls shall have at least the same fire resistance as that required for the sealing system.

Service support requirements

Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on both faces unless specified otherwise in the performance data.

FLEXIBLE AND RIGID WALL

Electrical Sockets

Flexible and Rigid wall constructions with a minimum wall thickness of 135mm.		
Penetration Specification	**Integrity**	**Insulation**
Inside back box to each face.	120	120
Outside back box to each face.	120	120
Inside to exposed face back box, outside to unexposed face back box.	120	120
Outside to exposed face back box, outside to unexposed face back box.	120	120
Inside baack box to each face (insulation cut away 400mm x 300mm).	120	90
Inside back box to each face.	120	120
Outside back box to each face.	90	90
Inside to exposed face back box, outside to unexposed face back box.	90	90
Outside to exposed face back box, inside to unexposed face back box.	120	120
Inside back box to each face (insulation cut away to 300mm x 300mm).	90	90

Electrical Sockets

Flexible and Rigid wall constructions with a minimum wall thickness of 135mm.		
Penetration Specification	**Integrity**	**Insulation**
Inside back box to each face.	90	90
Inside back box to each face.	120	120

FLEXIBLE AND RIGID WALL

Metallic Conduit, Cables

Flexible and Rigid wall constructions with a minimum wall thickness of 125mm.		
Penetration Specification	**Seal Depth**	**Classification**
Copper Pipe 40mm ø with 0.8mm wall thickness.	200mm wide x 100mm high x 125mm deep	EI 20 C/U E 120 C/U
Cables C1 and C2.	200mm wide x 100mm high x 125mm deep	EI 20 E 120

Performance Data - Walls

FLEXIBLE AND RIGID WALL

Cables

Flexible and Rigid wall constructions with a minimum wall thickness of 120mm.		
Penetration Specification	**Seal Depth**	**Classification**
Cables D1.	130mm ø x 120mm deep	EI 90 E 90

FLEXIBLE AND RIGID WALL

Electrical Sockets

Penetrationg Services				**Fire Rating**	
		Maximum Aperture Size (mm)	**Minimum Seal Depth (mm)**	**Integrity**	**Insulation**
Walls	Standard Cable (11mm) or small bunch of cables	25 circular	30	240	240
		30 circular	20	120	120
		50 circular	60	240	240
		60 circular	40	120	120
		100 circular	60	120	120
	Square trunking	100 square	150	240	240
		125 square	60	120	0
		125 square	80	120	120
Wall thickness	The walls shall be a minimum of 150mm thick for 240 minutes and 100mm thick for 120 minutes. The minimum density for the concrete of the wall is 670 kg/m^3 and for walls made of concrete blocks is 600 kg/m^3				
Application Technique	Clean all loose materials and foreign matter from the opening. Ensure opening is free from dust and oil. Ensure that services are in place. Pack the NS Putty around the service into the opening to the required depth. The surface of the NS Putty may be installed flush with non-fire exposed face or the fire exposed face of the wall / floor providing the required minimum depth of seal is applied.				
Service Support Requirements	The services must be supported adjacent to the seal on both sides so that the weight of the services is not taken by the seal.				
Maximum Opening Height	125mm x 125mm Maximum 50% of the area of the opening shall be filled with the penetrating services.				

Performance Data - Floors

Substrates

The floors shall be a minimum of **150mm thick**. Masonary / Concrete floors shall have a minimum density for concrete or brick of 670-780kg/m³ and for aerated concrete blocks of 600kg/m³. All floors shall have at least the same fire rating as that required for the sealing system.

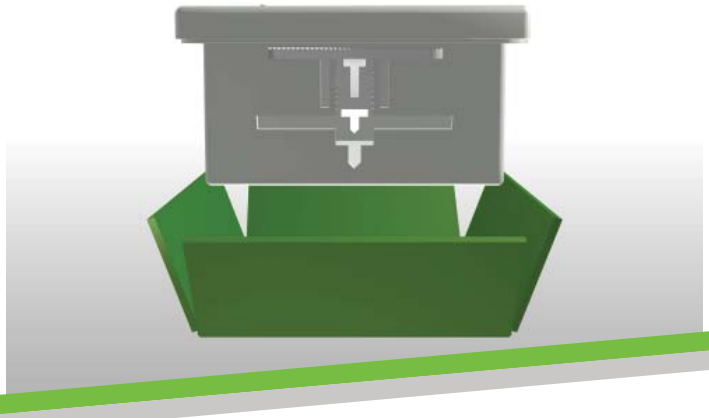
Service support requirements

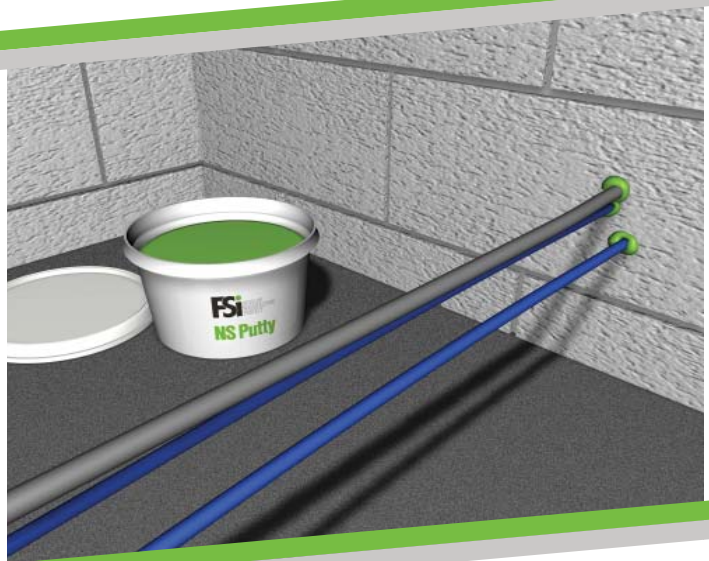
Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on top face unless specified otherwise in the performance data.

RIGID FLOOR

Electrical Sockets

Penetrating Services				Fire Rating	
		Maximum Aperture Size (mm)	Minimum Seal Depth (mm)	Integrity	Insulation
Floors	Standard Cable (11mm) or small bunch of cables	25 circular	30	240	240
		30 circular	20	120	120
		50 circular	60	240	240
		60 circular	40	120	120
		100 circular	60	120	120
	Square trunking	100 square	150	240	240
		125 square	60	120	0
		125 square	80	120	120
Floor thickness	The floors shall be a minimum of 150mm thick for 240 minutes and 100mm thick for 120 minutes. The minimum density for the concrete of the floor is 670 kg/m³				
Application Technique	Clean all loose materials and foreign matter from the opening. Ensure opening is free from dust and oil. Ensure that services are in place. Pack the NS Putty around the service into the opening to the required depth. The surface of the NS Putty may be installed flush with non-fire exposed face or the fire exposed face of the wall / floor providing the required minimum depth of seal is applied.				
Service Support Requirements	The services must be supported adjacent to the seal on both sides so that the weight of the services is not taken by the seal.				
Maximum Opening Height	125mm x 125mm Maximum 50% of the area of the opening shall be filled with the penetrating services.				





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