

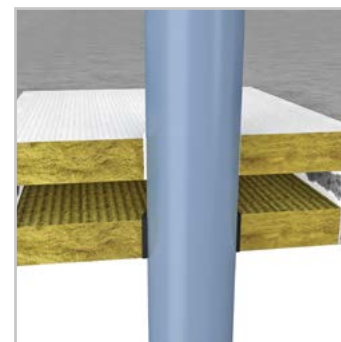
ROKU® System IWM III plus

Fire resistance rating:

EI 90 / 120 / 240 according to EN 13501

Approvals:

Europe: ETA-15/0869, CR 13050709-3, CR 210005902



Description

The ROKU® System IWM III plus consists of the high performance intumescent material „ROKU® Strip“, which is wrapped in one or more layers around the plastic pipe or the insulation. The wrap must be inserted into the annular gap flush with the surface. In the event of a fire, the intumescent material expands with high pressure and thus seals the opening hermetically against flames and smoke. For wall installations one wrap on each side of the wall and for floor installations one wrap on the underside of the floor must be provided.

Applications

- Sealing of plastic pipes of PVC, PE or PP with max. 160 mm pipe's outside diameter
- Sealing of multi-layer composite pipes as e. g. Alpex Duo / F 50, Uponor MLC pipe white or aquatherm green pipe MS
- Pipes without insulation can be insulated with max. 4 mm PE-acoustic insulation or with synthetic rubber insulation
- Application in ROKU® MFS Combined Penetration Seal is possible
- Can be used in shaft walls $\geq 2 \times 20$ mm

Advantages

- Only one product for a wide range of pipes
- Easy and excellent usability
- Flexibel and easy installation

Supplied form

ROKU® System IWM III plus		Accessories	
Article description	Art.-No.	Article description	Art.-No.
ROKU® Strip fire protection wrap, 12500 x 50 x 2 mm, self-adhesive	0303209060	Label	0750050060
ROKU® Strip fire protection wrap, 12500 x 50 x 2 mm, not self-adhesive	0303209000		
ROKU® MFC 200 fire protection coating, 6 kg, airless version	0720000200		
ROKU® MFC 200 fire protection coating, 12,5 kg, airless version	0720000201		
ROKU® MFC 200 fire protection coating, 400 g, thick version	0720000204		
ROKU® MFC 200 fire protection coating, 6 kg, thick version	0720000203		
ROKU® MFC 200 fire protection coating, 12,5 kg, thick version	0720000202		
ROKU® MFP 200 mineral fibre panel, 1000 x 600 x 50 mm, pre-coated	0720000205		
ROKU® MFP 200 mineral fibre panel, 1000 x 600 x 50 mm, final coated	0720000206		

Online



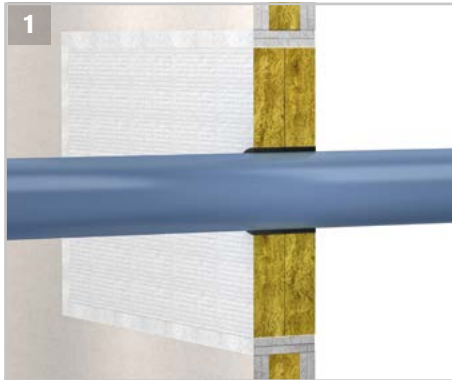
All approvals can be downloaded at
www.kuhn-brandschutz.com/systeme/roku-system-iwm-iii-plus
 or via the QR-Code.

Technical data

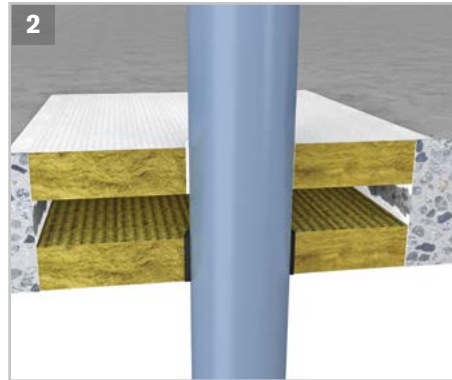
Max. Outside diameter	160 mm		
Suitable subsoils	<ul style="list-style-type: none"> ■ Solid walls ≥ 100 mm ■ Penetration seals ≥ 2 x 50 mm 	<ul style="list-style-type: none"> ■ Drywall partitions ≥ 94 mm ■ Shaft walls ≥ 2 x 20 mm 	<ul style="list-style-type: none"> ■ Solid floors ≥ 150 mm
Suitable insulations	<ul style="list-style-type: none"> ■ PE acoustic insulation ≤ 4 mm ■ Synthetic rubber insulation ≤ 31,5 mm 		
Suitable pipes	<ul style="list-style-type: none"> ■ alpex-duo / F 50 Profi ■ aquatherm green pipe MS ■ PE ■ PP 	<ul style="list-style-type: none"> ■ PVC ■ Uponor MLC pipe white 	

Overview "number of layers" see page 8

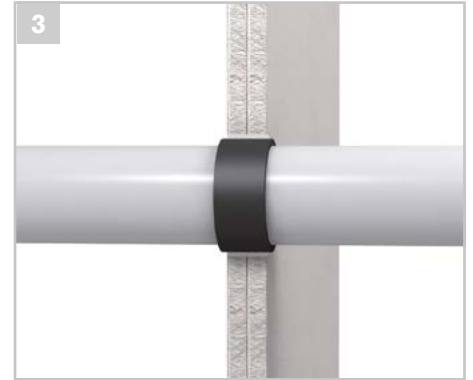
Assembly possibilities



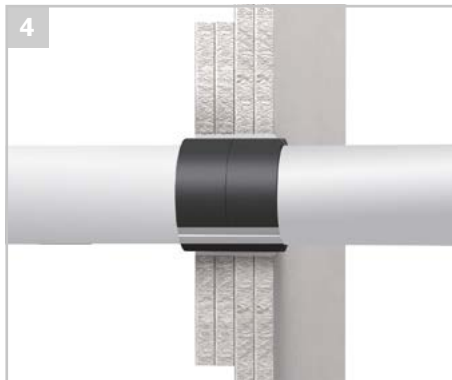
For the application in the ROKU® MFS Combined Penetration Seal in walls, the intumescent material must be wrapped around the pipe on both sides.



For floor installations, the intumescent material must be provided only on the underside.



For installations in shaft walls ≥ 2 x 20 mm, the intumescent material must be wrapped around the pipe only once.



For EI 120 requirements in shaft walls ≥ 2 x 20 mm, the intumescent material must be wrapped around the pipe on both sides.



For drywall partitions and solid wall installations, the intumescent material must be provided on both sides.



For floor installations, the intumescent material must be provided only on the underside.

Number of layers

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Insulation	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
PVC	≤ 50	1,8 - 5,6	without	2	2	EI 120 / 240 U/C
PVC	> 50 ≤ 110	1,8 - 12,3	without	3	3	EI 120 / 240 U/C
PVC	≤ 160	4,7	without		6	EI 120 / 240 U/C
PVC	≤ 110	1,8 - 12,3	PE acoustic insulation ≤ 4 mm	3	3	EI 90 / 120 U/C
PVC	≤ 50	1,8 - 5,6	Synthetic rubber insulation ≤ 31,5 mm	3	3 / 4 / 5	EI 90 / 120 U/C
PVC	> 50 ≤ 110	1,8 - 12,3	Synthetic rubber insulation ≤ 31,5 mm	4	3 / 4 / 5	EI 90 / 120 U/C

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Insulation	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
PE-HD	≤ 50	1,8	without	2	2	EI 120 / 240 U/C
PE-HD	> 50 ≤ 110	1,8 - 10,0	without	3	3	EI 120 / 240 U/C
PE-HD	≤ 110	1,8 - 10,0	PE acoustic insulation ≤ 4 mm	3	3	EI 90 / 120 U / C
PE-HD	≤ 50	1,8	Synthetic rubber insulation ≤ 9,5 mm	3	3	EI 90 / 120 U / C
PE-HD	> 50 ≤ 110	1,8 - 10,0	Synthetic rubber insulation ≤ 9,5 mm	3	3	EI 90 / 120 U / C
PE-HD	≤ 110	1,8 - 10,0	Synthetic rubber insulation ≤ 31,5 mm	4	4	EI 90 / 120 U / C

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Insulation	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
PP	≤ 50	1,8	without	2	2	EI 120 U/C
PP	> 50 ≤ 110	1,8 - 10,0	without	3	3	EI 120 U/C
PP	≤ 50	1,8	PE acoustic insulation ≤ 4 mm	2	2	EI 120 U/C
PP	> 50 ≤ 110	1,8 - 10,0	PE acoustic insulation ≤ 4 mm	3	3	EI 120 U/C
PP	≤ 50	1,8	Synthetic rubber insulation ≤ 9,5 mm	3	3	EI 120 U/C
PP	> 50 ≤ 75	1,8 - 10,0	Synthetic rubber insulation ≤ 9,5 mm	3	3	EI 120 U/C
PP	≤ 110	1,8 - 10,0	Synthetic rubber insulation ≤ 31,5 mm	4	4	EI 120 U/C

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Insulation	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
REHAU RAUPIANO PLUS, Wavin SiTech, POLO-KAL NG, Geberit Silent-PP	≤ 50		PE acoustic insulation ≤ 4 mm	2	2	EI 120 U/C
	> 50 ≤ 75			3	3	EI 120 U/C
	> 75 ≤ 90			4	4	EI 120 U/C
	> 90 ≤ 110			5	5	EI 120 U/C

Type of pipes multi-layer composite pipes e.g.:	Pipe diameter (mm)	Pipe wall thickness (mm)	Insulation	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
aquatherm green pipe, Uponor MLC pipe white, alplex-duo multilayer	≤ 40	3,5 - 15,2	without	2	2	EI 90 / 120 U/C
	> 40 ≤ 75		PE acoustic insulation ≤ 4 mm	3	3	EI 90 / 120 U/C
	> 75 ≤ 110		Synthetic rubber insulation ≤ 31,5 mm	4	4	EI 90 / 120 U/C

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Sealing type	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
PVC	≤ 50	2,4	ROKU® MFS Combined Penetration Seal	2	2	EI 60/120 U/U
PVC	≤ 75	3,6		3	3	EI 120 U/U
PVC	≤ 110	5,3		4	4	EI 90/120 U/U
PVC	≤ 160	7,7		6	6	EI 90 / 120 U/U
PP	≤ 50	2,9		2	2	EI 60/120 U/U
PP	≤ 75	4,3		3	3	EI 120 U/U
PP	≤ 110	6,3		4	6	EI 90/120 U/U
PP	≤ 160	9,1		6	6	EI 90 / 120 U/U

Type of pipes	Pipe diameter (mm)	Pipe wall thickness (mm)	Sealing type	Number of layers (wall)	Number of layers (floor)	Fire resistance rating
PVC	≤ 50	3,7	Shaft walls ≥ 2 x 20 mm	2		EI 90 U/U
PE	≤ 50	4,6		2		EI 90 U/U
PP	≤ 50	4,6		2		EI 90 U/U
PVC	≤ 110	5,3		4		EI 90/120 U/C
PE	≤ 110	6,3		4		EI 90/120 U/C
PP	≤ 110	6,3		4		EI 90/120 U/C

For more details please have a look at the ETA-15/0869.