ROKU® System EC Endless Collar

Fire resistance rating:

El 30 / 60 / 90 / 120 / 180 / 240 according to EN 13501

Approvals:

Europe: ETA-13/0640, CR 210006105-2



Description

The ROKU® System EC Endless Collar consists of the high performance intumescent material "ROKU® Strip EM" or "ROKU® Strip" (for U/U applications), which is wrapped in one or more layers around the pipe or the insulation and fixed with a stainless steel strap and hooks at the wall or floor. 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 pipe collar on each side of the wall and for floor installations one collar on the underside of the floor must be provided.

Applications

- Sealing of plastic pipes up to max. Ø 160 mm in solid walls, drywall partitions and solid floors (fire resistance rating EI 120/240 U/C bzw. EI 90/120 U/U)
- Sound-isolated sewage pipes for example Wavin SiTech, REHAU RAUPI-ANO PLUS, Geberit Silent-PP, POLO-KAL NG up to Ø 160 mm with fire resistance rating EI 90/120 U/C or EI 90/120 U/U, COES Bluepower or TRIPLUS 3 layer soundproof pipe EI 120 U/C
- For multi-layer composite piping ≤ 110 mm (fire resistance rating El 90/120 U/C)
- PE-acoustic insulation is possible at plastic pipes
- Synthetic rubber insulation on plastic pipes, copper and metal pipes is possible
- Useable in combination with ROKU[®] FPF Fire Protection Foam (straight pipes and corner solutions)

Advantages

- Flexible solution for individual applications
- Very low installation height of the collar
- One sealing serves for maximum 3 pipes side by side
- Suitable for the application in wet and humid areas

- Slim collar
- For plastic pipes in corner constructions only 2/3 of the pipe sealing may be applied
- Delivery in a practical dispenser box

Supplied form

| Description | ArtNo. | Accessories | |
|---|------------|---------------------------------------|------------|
| U/U Dispenser box incl. | | Article description | ArtNo. |
| 10 m ROKU® Strip fire protection wrap, 3 m stainless steel strap, 18 hooks, | 0303209011 | ROKU® FPF Fire Protection Foam, 180 g | 0726000000 |
| 6 labels, 1 assembly instruction | | ROKU® FPF Fire Protection Foam, 480 g | 0726000001 |
| U/C Dispenser box incl. | | Label | 0750050060 |
| 10 m ROKU® Strip EM fire protection wrap, 3 m stainless steel strap, 18 hooks, | 0318209010 | | |
| 6 labels, 1 assembly instruction | | | |
| Single articles | | | |
| ROKU® Strip fire protection wrap, 10000 x 40 mm (L x B) | 0303209081 | | |
| Stainless steel strap, 3000 mm | 0707002101 | | |
| Hooks, 18 pcs | 0707002100 | | |
| Label, 1 pcs | 0750050060 | | |

Online



The approvals and the installation video can be downloaded at www.kuhn-brandschutz.com/systeme/roku-system-ec-endless-collar or via the QR-Code.

Technical data

| Max. Outside diameter | 160 mm | | | | | | | | |
|-----------------------|--|--|--|--|--|--|--|--|--|
| Suitable subsoils | ■ Solid walls ≥ 100 mm | ■ Drywall partitions ≥ 94 mm | ■ Solid floors ≥ 150 mm | | | | | | |
| Suitable insulations | ■ PE acoustic insulation ≤ 4 mm ■ Synthetic rubber insulation at plastic pipes, steel, stainless steel and copper pipes | | | | | | | | |
| Suitable pipes | alpex F50 PROFI / alpex L aquatherm green pipe MS COES Bluepower Geberit Silent-PP Plastic composite pipes Copper, steel and stainless steel pipes Mineral fibre reinforced plastics | Ostendorf HT System PP PE-HD PP POLO-KAL NG PVC-U REHAU RAUPIANO PLUS Uponor Unipipe MLC | ■ TRIPLUS 3 layer soundproof pipe ■ Wavin SiTech | | | | | | |

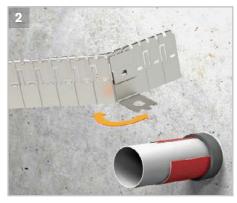
Selection of possible applications (exact details in the assembly instruction)

| Pipe diameter (mm) | 32 | 32 | 40 | 40 | 50 | 50 | 63 | 63 | 75 | 75 | 90 | 90 | 110 | 110 | 125 | 125 | 140 | 140 | 160 | 160 |
|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| Insulation thickness (mm) | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 | - | 4 |
| Number of layers (pcs) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 6 | 6 | 6 | 6 |
| Min. Length of material (mm) | 250 | 320 | 320 | 360 | 375 | 440 | 685 | 780 | 800 | 895 | 1290 | 1400 | 1545 | 1660 | 2190 | 2425 | 2860 | 3050 | 3365 | 3530 |
| Metal links (pcs) | 12 | 14 | 14 | 15 | 16 | 17 | 18 | 20 | 21 | 23 | 25 | 27 | 29 | 31 | 32 | 34 | 36 | 38 | 40 | 42 |
| Hooks (pcs) | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |

Assembly possibilities



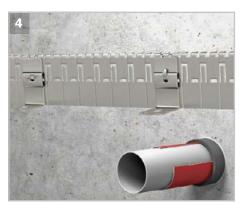
The collar could be installed around insulated and uninsulated pipes. Wrap the 40 mm wide intumescent wrap with appropriate layers depending on pipe diameter around the pipe or the insulation. Through taking-off the self-adhesive protection foil the layers of the strip will be glued together.



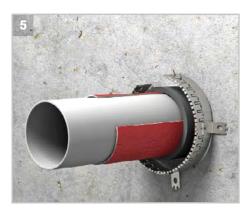
Count the number of required links according to the indications of the chart. Clip the clamp in the stainless steel strap at the required length. Make sure it is flush with the strap. Bend the stainless steel strap to and fro so that it splits. No additional tool required.



Push the long nose of the clamp through the stainless steel strap and fix the clamp in its place by pushing the clamp and finally bending by a 90° angle.



Clip the clamp in its position, push the 90° bended tab through the aperture and bend again by 90° so that the clamp is fixed.



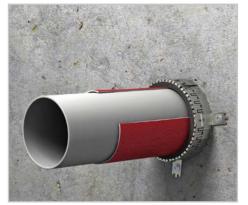
Bend the two noses at the end of the stainless steel strap by a 90° angle. Join the other end of the strap by pushing the bended tabs in the horizontal notches of the other side of the stainless steel strap. Finally, bend the tabs so that both ends of the strap are joined together.



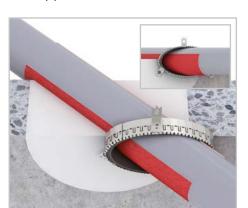
Fix to the wall or floor with approved rawlplugs. In drywall partitions and mineral fiber sealings use threaded rods M6 or M8. After that, the sealing can be signed permanently with a label.

Applications

Uninsulated or acoustic insulated plastic pipes



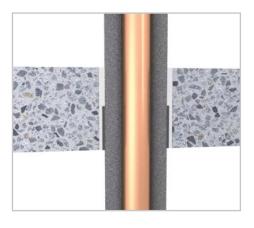
Inclined pipes



Pipes side by side



Non-combustible pipes with wrap into the floor



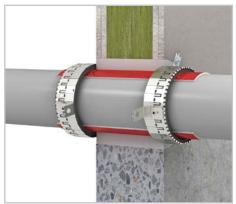
Synthetic rubber insulated aluminium composite pipes



2 x 45° elbow application



Wall penetration



Non-combustible pipes with a collar on the underside of the floor



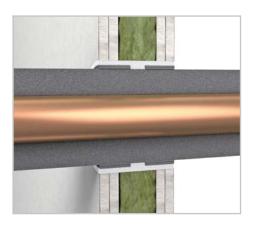
Pipe sockets



Solutions for corners



Non-combustible pipes with wrap into the wall



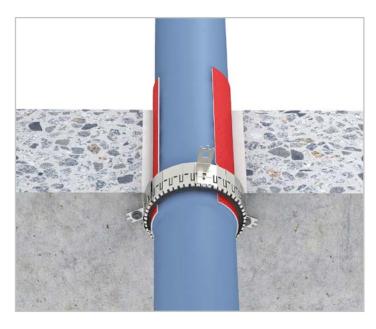
Variants

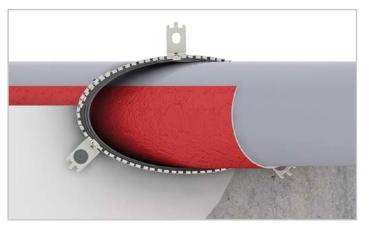
Pipe sockets

Simply wrap the intumescent strip around the pipe socket directly, or on the insulation respectively. Then fix the stainless steel strap double-sided to the wall or one-sided on the underside of the floor.

Inclined or 2 x 45° elbow pipes

For pipe sealings on inclined pipes or 2 x 45° elbow pipes wrap the intumescent strip ROKU® Strip in an oval shape around the pipe and secure with the stainless steel strap.









Solutions for corners

Pipes which lie directly in the corner (joint gap between pipe and wall ≤ 10 mm) and thus no complete wrapping with the intumescent material ROKU® Strip is possible, the intumescent material should be wrapped around the pipe that it abuts on both sides of the wall (2/3 wrapping). The stainless steel strap should be also applied from wall to wall with at least 3 hooks. For joint filling use the fire protection foam ROKU® FPF or non-combustible materials such as mortar.

Pipes side by side

Up to 3 pipes side by side with maximum pipe outside diameter 75 mm may be sealed with one pipe collar. The intumescent material ROKU® Strip is laid around the pipes or insulation respectively, and finally in the same way the stainless steel strap. The stainless steel strap is fixed in the spaces between the pipes (distance between the single pipes \leq 15 mm).



