

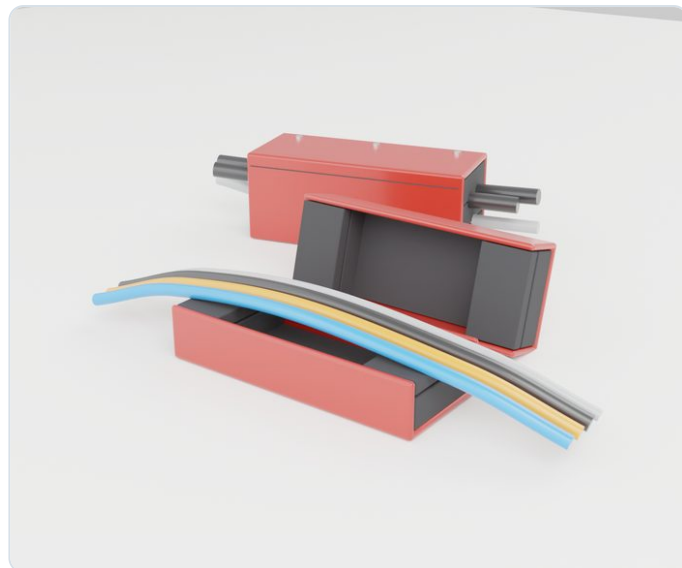
Firebreak Service Transits — re-enterable firestopping for walls and floors, engineered by PYRALTA

Firebreak Service Transits comprise a range of circular and rectangular devices designed to be installed in fire-resistant walls and floors where cables and other services are required to penetrate. Once installed, the transits become a **dry system**, especially suited to situations where frequent changes to services are a requirement. The especially formulated, fully durable intumescent provides up to four hours' fire resistance across the full range of transit sizes.

Under fire conditions the foam plugs at each end of the transit restrict the passage of smoke, whilst the intumescent filler at the core expands to many times its original thickness, closing the opening with a dense block of fire-resistant char.

The transits are manufactured with a durable powder-coated steel outer casing. Each transit is **hinged** to allow retro-fitting around services which are already installed. Once in place it is a simple process to remove or add new services at a later date without the need for wet trades.

Circular transits range from 50 mm to 150 mm Ø. Rectangular transits range up to 125 mm × 1100 mm — the largest able to accommodate two 500 mm wide cable baskets side by side. The smaller square transits can be grouped in twos, threes, fours and sixes. All transits can be supplied with purpose-designed galvanised steel mounting flanges, including flanges for grouped transits.



GROUPED CONFIGURATIONS — 102 MM AND 65 MM SQUARE TRANSITS



Single



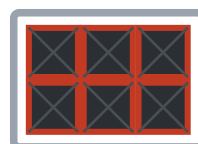
Duplex



Triplex



Quadplex



Sixplex

PERFORMANCE SUMMARY

Fire classification to **EN 13501-2**, CE mark (**ETA 21/0207**)

UKCA DoP available

Flexible or rigid walls **≥ 100 mm**

Rigid concrete floors **≥ 150 mm**

Up to **4 h** fire resistance (EI240)

Durability to **EAD 350454-00-1104**, Y₂

UL International **UL-EU-00772**

Manufactured under **ISO 9001**

Coverage includes a wide range of cable types and sizes, cable baskets, metal pipes with continuous combustible insulation and small plastic pipes. The following pages give the tested configurations; PYRALTA confirms the applicable classified system per penetration before order.

Electrical cables in dry line or concrete block/masonry walls of minimum thickness 100 mm

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables up to 80 mm Ø	120	30
	Unsheathed wire up to 24 mm Ø	120	30
	Telecoms cables in bundles up to 100 mm Ø	120	60
	Type C2, D1 & D2 electrical cables*	120	45
	Type A1, A3, C1 & D3 electrical cables*	120	60
125 x 125 to 125 x 1100	Electrical cables up to 80 mm Ø	120	30
	Unsheathed wire up to 24 mm Ø	120	30
	Telecoms cables in bundles up to 100 mm Ø	120	60
	Type C2, C3, D1, D2 & E electrical cables*	120	45
	Type A1, A2, A3 & C1 electrical cables*	120	60

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Electrical cables in dry line or concrete block/masonry walls of minimum thickness 100 mm with single layer of Insulwrap applied to exposed surfaces of Transit

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables up to 80 mm Ø	120	30
	Unsheathed wire up to 24 mm Ø	120	30
	Telecoms cables in bundles up to 100 mm Ø	120	90
	Type C2, D1 & D2 electrical cables*	120	45
	Type A1, A2, C1 & D3 electrical cables*	120	60
	Type A3 electrical cables*	120	90
125 x 125 to 125 x 1100	Electrical cables up to 80 mm Ø	120	30
	Unsheathed wire up to 24 mm Ø	120	30
	Telecoms cables in bundles up to 100 mm Ø	120	90
	Type C2, C3, D1, D2 & E electrical cables*	120	45
	Type A1, A2, C1 & D3 electrical cables*	120	60
	Type A3 electrical cables*	120	90

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Electrical cables in dry line or concrete block/masonry walls of minimum thickness 100 mm with single layer of 300 mm wide Insulwrap protection to cables both sides

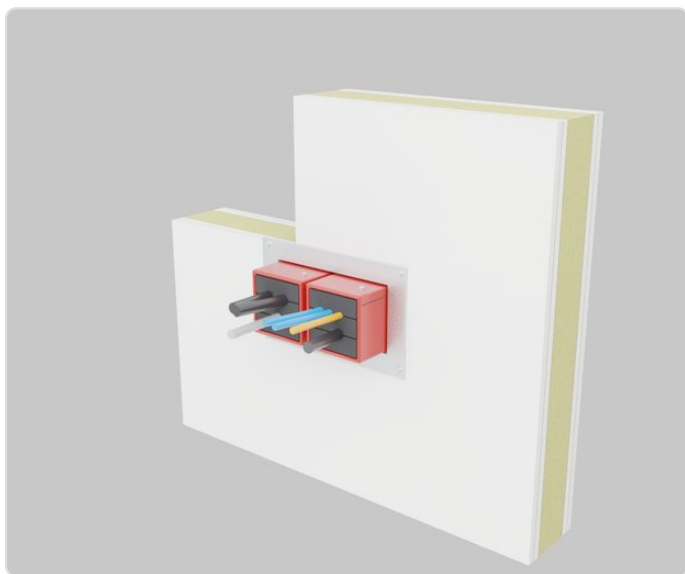
Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
All sizes	Electrical cables up to 80 mm Ø	120	60
	Unsheathed wire up to 24 mm Ø	120	60
	Telecoms cables in bundles up to 100 mm Ø	120	60

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

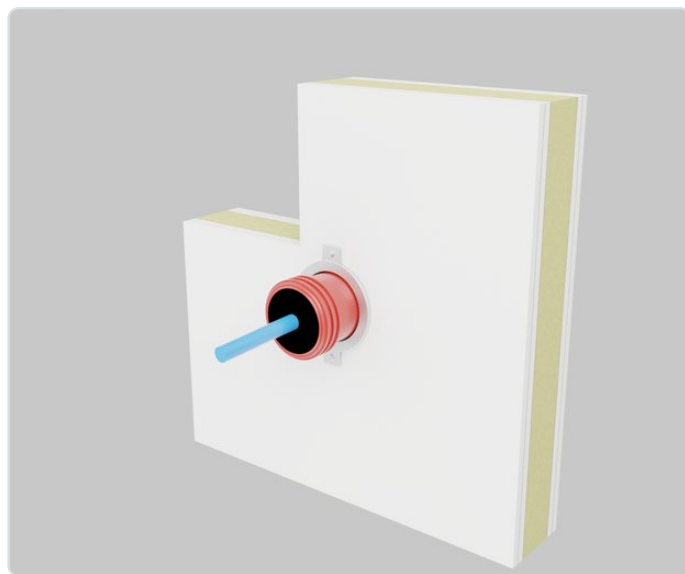
Electrical cables in dry line or concrete block/masonry walls of minimum thickness 100 mm with a single layer of 300 mm wide Insulwrap protection to cables both sides and also applied to exposed surfaces of Transit

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables up to 80 mm Ø	120	120
	Unsheathed wire up to 24 mm Ø	120	60
	Telecoms cables in bundles up to 100 mm Ø	120	120
125 x 125 to 125 x 1100	Electrical cables up to 80 mm Ø	120	90
	Unsheathed wire up to 24 mm Ø	120	60
	Telecoms cables in bundles up to 100 mm Ø	120	120
	Type D2 & E electrical cables*	120	120

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).



Grouped 102 mm transits with duplex mounting flange in a light partition (2 x 12.5 mm board each side, stone-wool core).



100 mm Ø circular transit with circular mounting flanges in a light partition.

Pipes in concrete block/masonry walls of minimum thickness 100 mm

Penetrating pipe	Max Ø (mm)	Min wall thickness (mm)	Insulation	Min insulation thickness (mm)	Integrity (E)	Integrity & insulation (EI)
PVC	82	3.2	N/A	N/A	120	90
Copper/steel	42	1.5	K-Flex ST or Armaflex (CS)	13	240	90
	42	1.5	K-Flex ST or Armaflex (CS)	19	240	120
	42	1.5	K-Flex ST or Armaflex (CS)	32	240	180
	28	1.2	K-Flex ST or Armaflex (CS)	9	240	90
	10	1.2	K-Flex ST or Armaflex (CS)	6	240	90
Steel	90	1.6	K-Flex ST or Armaflex (CS)	13	240	90
	64	1.6	K-Flex ST or Armaflex (CS)	9	240	60
	64	1.6	K-Flex ST or Armaflex (CS)	13	240	90
	64	1.6	K-Flex ST or Armaflex (CS)	19	240	120
	64	1.6	K-Flex ST or Armaflex (CS)	32	240	180
	40	1.5	K-Flex ST or Armaflex (CS)	13	240	120
	40	1.5	K-Flex ST or Armaflex (CS)	25	240	180
	25	1.2	K-Flex ST or Armaflex (CS)	9	240	60
	25	1.2	K-Flex ST or Armaflex (CS)	13	240	90
	25	1.2	K-Flex ST or Armaflex (CS)	25	240	120
	10	1	K-Flex ST or Armaflex (CS)	6	240	90

All transit sizes. (CS) = continuous sustained.

Pipes in partition walls of minimum thickness 100 mm

Penetrating pipe	Max Ø (mm)	Min wall thickness (mm)	Insulation	Min insulation thickness (mm)	Integrity (E)	Integrity & insulation (EI)
PVC	82	3.2	N/A	N/A	120	90
Copper/steel	42	1.5	K-Flex ST or Armaflex (CS)	13	120	90
	42	1.5	K-Flex ST or Armaflex (CS)	19	120	120
	28	1.2	K-Flex ST or Armaflex (CS)	9	120	90
	10	1.2	K-Flex ST or Armaflex (CS)	6	120	90
Steel	90	1.6	K-Flex ST or Armaflex (CS)	13	120	90
	64	1.6	K-Flex ST or Armaflex (CS)	9	120	60
	64	1.6	K-Flex ST or Armaflex (CS)	13	120	90
	64	1.6	K-Flex ST or Armaflex (CS)	19	120	120
	40	1.5	K-Flex ST or Armaflex (CS)	13	120	120
	25	1.2	K-Flex ST or Armaflex (CS)	9	120	60
	25	1.2	K-Flex ST or Armaflex (CS)	13	120	90
	25	1.2	K-Flex ST or Armaflex (CS)	25	120	120
	10	1	K-Flex ST or Armaflex (CS)	6	120	90

All transit sizes. (CS) = continuous sustained.

Electrical cables in concrete floors of minimum thickness 150 mm

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables up to 80 mm Ø	180	30
	Electrical cables up to 21 mm Ø	240	60
	Telecoms cables in bundles up to 100 mm Ø	240	60
	Type C3 electrical cables*	240	30
	Type C2 & D3 electrical cables*	240	45
	Type C1 & B electrical cables*	240	60
125 x 125 to 125 x 1100	Steel cable basket	180	180
	Electrical cables up to 80 mm Ø	180	60
	Unsheathed wire up to 24 mm Ø	180	60
	Telecoms cables in bundles up to 100 mm Ø	180	180
	Type A3, C1, C2, D3 & G1 electrical cables*	180	60
	Type A1, B, D1, D2, E & G2 electrical cables*	180	90
	Type A2 & C3 electrical cables*	180	180

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Electrical cables in concrete floors of minimum thickness 150 mm with single layer of 300 mm Insulwrap protection to cables on non-fire side only

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables up to 80 mm Ø	180	45
	Electrical cables up to 21 mm Ø	240	60
	Telecoms cables in bundles up to 100 mm Ø	240	60
125 x 125 to 125 x 1100	Steel cable basket	120	120
	Electrical cables up to 80 mm Ø	120	60
	Unsheathed wire up to 24 mm Ø	120	60
	Telecoms cables in bundles up to 100 mm Ø	120	120
	Type B & C1 electrical cables*	120	60
	Type E electrical cables*	120	90
	Type A1, A2, A3, C2, C3, D1, D2 & D3 electrical cables*	120	120

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Electrical cables in concrete floors of minimum thickness 150 mm with single layer of Insulwrap protection applied to exposed surfaces of Transit on non-fire side

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables 51 to 80 mm Ø	240	30
	Electrical cables 22 to 50 mm Ø	180	30
	Electrical cables up to 21 mm Ø	240	60
	Telecoms cables in bundles up to 100 mm Ø	240	60

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Electrical cables in concrete floors of minimum thickness 150 mm with single layer of 300 mm wide Insulwrap protection applied to cables on non-fire side and also applied to exposed surfaces of Transit on non-fire side

Transit size (mm)	Penetrating service	Integrity (E)	Integrity & insulation (EI)
102 x 102, 50, 100 & 150 Ø	Electrical cables 51 to 80 mm Ø	180	90
	Electrical cables 22 to 50 mm Ø	240	90
	Electrical cables up to 21 mm Ø	240	120
	Telecoms cables in bundles up to 100 mm Ø	240	120
	Type A1, C1, C2, C3, D2 & D3 electrical cables*	240	120

* Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3 (see cable type definitions, page 7).

Pipes in concrete floors of minimum thickness 150 mm

Penetrating pipe	Max Ø (mm)	Min wall thickness (mm)	Insulation	Min insulation thickness (mm)	Integrity (E)	Integrity & insulation (EI)
PVC	82	3.2	N/A	N/A	180	120
Copper/steel	42	1.5	K-Flex ST or Armaflex (CS)	13	180	90
	42	1.5	K-Flex ST or Armaflex (CS)	40	180	120
	28	1.2	K-Flex ST or Armaflex (CS)	9	180	120
Steel	90	1.6	K-Flex ST or Armaflex (CS)	13	180	120
	64	1.6	K-Flex ST or Armaflex (CS)	9	180	90
	64	1.6	K-Flex ST or Armaflex (CS)	13	180	120
	40	1.5	K-Flex ST or Armaflex (CS)	13	180	90
	40	1.5	K-Flex ST or Armaflex (CS)	40	180	120
	25	1.2	K-Flex ST or Armaflex (CS)	9	180	120
	10	1	K-Flex ST or Armaflex (CS)	6	180	120

All transit sizes. (CS) = continuous sustained.

Cables as referenced in EN 1366-3: 2009, Annex A, Tables A.1 and A.3

Title	Description
Type A1 cable	5x 1.5 mm ² core HD603.3 electrical cable with PVC insulation, PVC sheath and 14 mm Ø
Type A2 cable	5x 1.5 mm ² core HD22.4 electrical cable with EPR insulation, PO sheath and 11.2–14.4 mm Ø
Type A3 cable	5x 1.5 mm ² core HD604.5 electrical cable with XLPE insulation, EVA sheath and 13 mm Ø
Type B cable	1x 95 mm ² core HD6.3.3 electrical cable with PVC insulation, PVC sheath and 18–21 mm Ø
Type C1 cable	4x 95 mm ² core HD604.5 electrical cable with XLPE insulation, EVA sheath and 42 mm Ø
Type C2 cable	4x 95 mm ² core HD22.4 electrical cable with EPR insulation, PO sheath and 48.4–61 mm Ø
Type C3 cable	4x 95 mm ² core HD604.5 electrical cable with XLPE insulation, EVA sheath and 42–45.5 mm Ø
Type D1 cable	4x 185 mm ² core HD603.3 electrical cable with PVC insulation, PVC sheath 52 mm Ø
Type D2 cable	4x 185 mm ² core HD22.4 electrical cable with EPR insulation, PO sheath and 64–80 mm Ø
Type D3 cable	4x 185 mm ² core HD604.5 electrical cable with XLPEC insulation, EVA sheath and 13 mm Ø
Type E cable	1x 185 mm ² core HD603.3 electrical cable with PVC insulation, PVC sheath and 23–27 mm Ø
Type F cable	20 mm x 2 mm x 0.6 mm screened electrical cable with PVC insulation, PVC sheath and 15–17 mm Ø
Type G1 wire	1x 95 mm ² core H07V-R HD21.3 electrical wire with PVC insulation and 14.1–17.1 mm Ø
Type G2 wire	1x 185 mm ² core H07V-R HD21.3 electrical wire with PVC insulation and 19.3–23.3 mm Ø

Dimensions and packaging details (1 of 2) — manufacturer item references

Item ref	Item	Pack size
31940	65 x 65 x 254 mm long Firebreak Service Transit	6 units per box
31972	65 mm mounting flange – single set	6 units per box
31974	65 mm mounting flange – duplex set	3 units per box
31976	65 mm mounting flange – triplex set	2 units per box
31977	65 mm mounting flange – quadplex set	1 unit per box
31978	65 mm mounting flange – sixplex set	1 unit per box
31942	102 x 102 x 254 mm long Firebreak Service Transit	6 units per box
31982	102 mm mounting flange – single set	6 units per box
31984	102 mm mounting flange – duplex set	3 units per box
31986	102 mm mounting flange – triplex set	2 units per box
31987	102 mm mounting flange – quadplex set	1 unit per box
31988	102 mm mounting flange – sixplex set	1 unit per box
33250	250 x 125 x 254 mm long Firebreak Service Transit	Each
33255	250 mm ST mounting flange – single set	Each

Order via PYRALTA complete-set SKUs (transit + mounting-flange set) — see the PYRALTA commercial price list. Manufacturer references shown for traceability.

Dimensions and packaging details (2 of 2)

33350	350 x 125 x 254 mm long Firebreak Service Transit	Each
33355	350 mm ST mounting flange – single set	Each
33450	450 x 125 x 254 mm long Firebreak Service Transit	Each
33455	450 mm ST mounting flange – single set	Each
33550	550 x 125 x 254 mm long Firebreak Service Transit	Each
33555	550 mm ST mounting flange – single set	Each
33110	1100 x 125 x 254 mm long Firebreak Service Transit	Each
33510	1100 mm mounting flange – single set	Each
31938	50 mm Ø x 254 mm long Firebreak Service Transit	6 units per box
31968	50 mm Ø mounting flange – single set	6 units per box
31950	100 mm Ø x 254 mm long Firebreak Service Transit	6 units per box
31998	100 mm Ø mounting flange – single set	6 units per box
31915	150 mm Ø x 254 mm long Firebreak Service Transit	5 units per box
31999	150 mm Ø mounting flange – single set	5 units per box

INSTALLATION — TRANSITS

- 1 Select the Firebreak Service Transit to suit the opening size.
- 2 Where necessary, increase the opening size to accommodate the selected transit.
- 3 Ensure the opening is clean and free from obstructions.
- 4 Remove and place to one side the foam plugs at each end of the transit and insert the transit into the opening.
- 5 Where the penetrating service is already present, open the lid of the transit to allow it to be fitted around the services.
- 6 Position the transit at mid depth within the wall/floor and seal any gaps around the transit on the first side using Firebreak 22 sealant or Firebreak Compound mixed to a trowellable consistency.
- 7 The compound is particularly useful where there is an existing opening significantly larger than the transit to be fitted.
- 8 Temporary support may be required in floor installations.
- 9 Fit a pair of the steel mounting flanges around the transits hard up against the face of the wall/floor and screw together with the fixings provided.
- 10 The flanges may also be mechanically fixed to the face of the wall/floor through the screw openings, but this is entirely optional.
- 11 Repeat the procedure of filling the opening around the transit and fixing the steel mounting flanges on the opposite side of the wall/floor.
- 12 Modify if necessary and refit the foam plugs tightly around the penetrating service at both sides of the seal to restrict the passage of cold smoke.
- 13 Additional plugs are readily available.

INSTALLATION — INSULWRAP

- 1 Where required, measure the circumference of the services penetrating the transit.
- 2 Using a sharp knife or scissors, cut a length of Insulwrap equal to the circumference measurement + 25 mm to allow for a small overlap.
- 3 Wrap the cut length of Insulwrap around the services with the foil on the outside and stick the small overlap down using a strip of self-adhesive aluminium tape or similar.
- 4 Slide the Insulwrap along the services so that it butts up tightly against the face of the transit.
- 5 Using stainless steel banding or wire, further secure the Insulwrap approximately 75 mm from each end.
- 6 Repeat the procedure on the other side of the seal.
- 7 If required, the insulation performance of any exposed surfaces of the body of the transit can also be increased: measure the width of the exposed body and cut lengths of Insulwrap to the same width and at the lengths required.
- 8 Apply a zig-zag bead of Firebreak 1100 High Temperature Adhesive along the length of each exposed surface and fix the strips of Insulwrap with the foil face showing.

END USE, STORAGE & MAINTENANCE

End use	Internal use; mechanically and durability tested; intumescent components not affected by moisture. Collars suitable for use at temperatures below 0 °C.
Maintenance	No routine maintenance required; periodic inspection for possible damage recommended.
Storage	Store in dry conditions between 5 °C and 40 °C.
Shelf life	Unlimited when stored under recommended conditions.
Health & safety	Refer to the Safety Data Sheet before use.

Since the product is applied under circumstances beyond our control, no direct or consequential liability is accepted, whether in contract or in tort, for the interpretation of these recommendations. Firebreak® is a registered trademark of its owner. PYRALTA supplies, engineers and installs Firebreak Service Transit systems in Europe. Technical content reproduced from the manufacturer's TDS Issue 04, 12/25.