EN

* DIN 4102-12
* CSN 73 0895
* STN 92 0205

E90

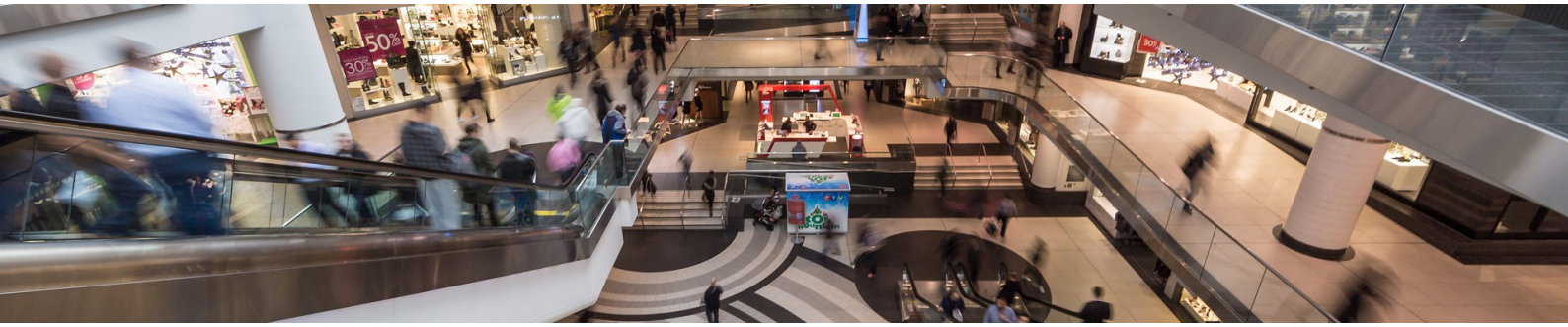
FIRE RESISTANT SYSTEMS

BEBasor
CABLE TRAY SPECIALIST

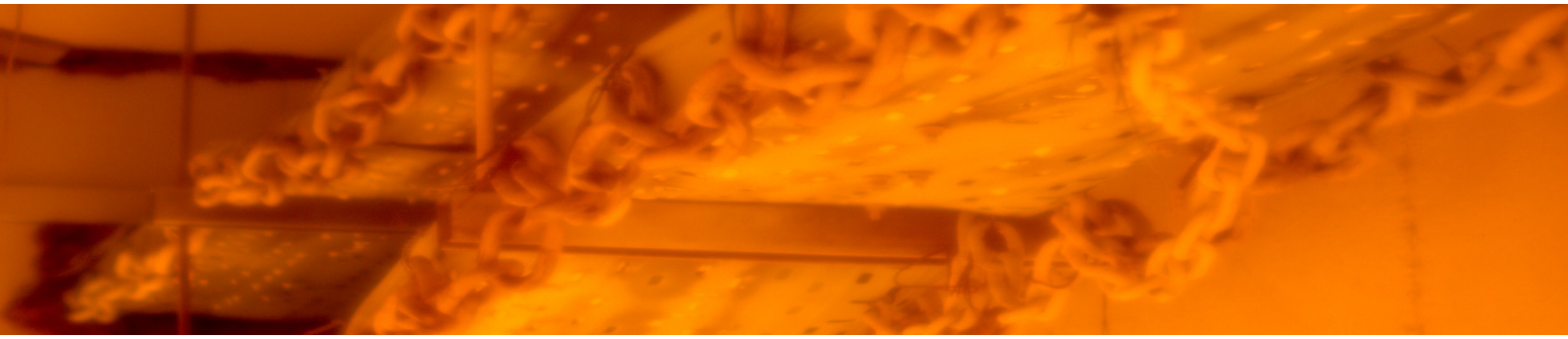
INTRODUCTION

Basor Electric, sensitive to the need to minimize the consequences of a fire, has subjected its cable management systems to rigorous fire resistance tests to ensure the performance of their products. In the event of a fire, it is necessary to **maintain the functionality** of certain electrical installations, such as smoke extractors, emergency lighting, fire alarms, or pressure installations for extinction.

Depending on the time it is necessary to maintain the functionality of the installation, we will select the ideal cable management system for each case. The functionality of these facilities in **public places** is very important. In this type of premises more time is needed for evacuation due to the large accumulation of people.



All Basor Electric cable trays are manufactured under Standard **EN IEC 61537 "Cable Tray and cable ladder systems for cable management"**. In this standard it is foreseen to contemplate the risks of resistance to fire, but until now this aspect has not been developed.

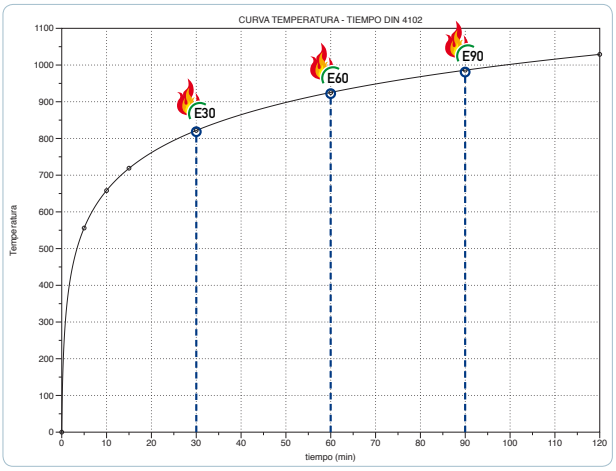


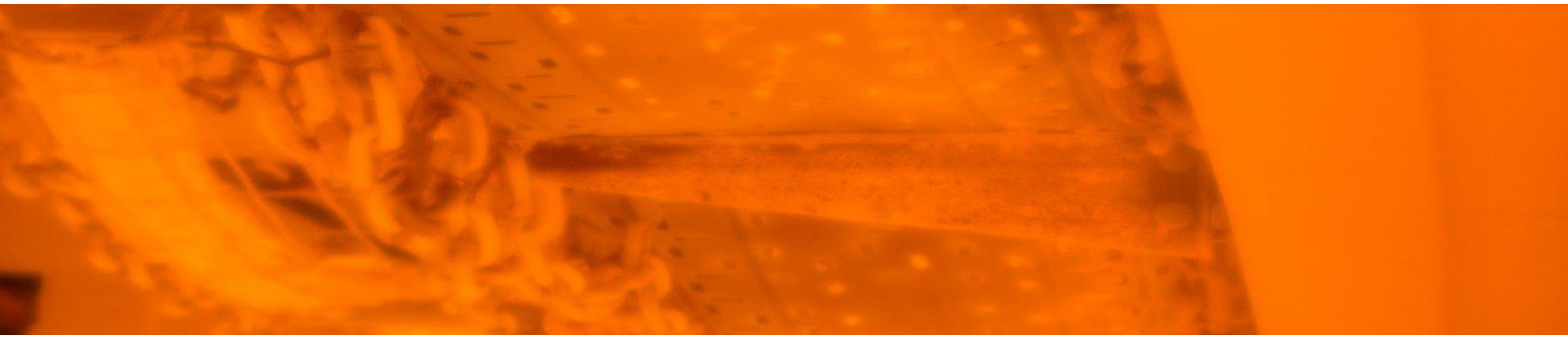
BASOR CABLE TRAYS AGAINST FIRE

Due this lack of applicable European or international regulations, different local standards are used, such as the German, Czech and Slovak standards, which study the fire behavior of the electrical cable management systems necessary to maintain the integrity of the circuit. These standards define the conditions of the test to verify that the system, consisting of trays, supports, accessories and fire resistant cables, **maintains the power supply** for a certain time even in extreme fire conditions.

DIN 4102-12	"Fire behaviour of building materials and elements. Fire resistance of electric cables systems required to maintain circuit integrity"
CSN 730895	"Fire safety engineering - Maintaining the functionality of cable lines under fire conditions - requirements, testing, classification Px-R, R-PHX and application of test results"
STN 920205	"Fire behaviour of construction products and building constructions. Circuit integrity maintenance of cable systems. Requirements, testing, classification and aplication of test results"

Basor Electric has used these Standards to study the **behavior and functionality** of its products in the event of a fire. The standards studies the response of the installation of the set of fire resistant cables subjected to tension with the supports and the cable trays **inside a oven with a defined temperature-time curve.**



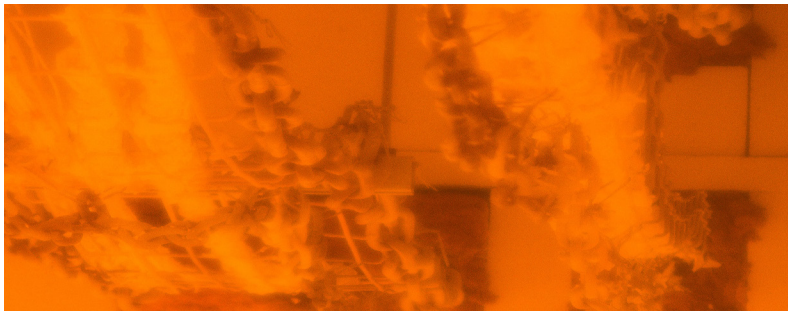


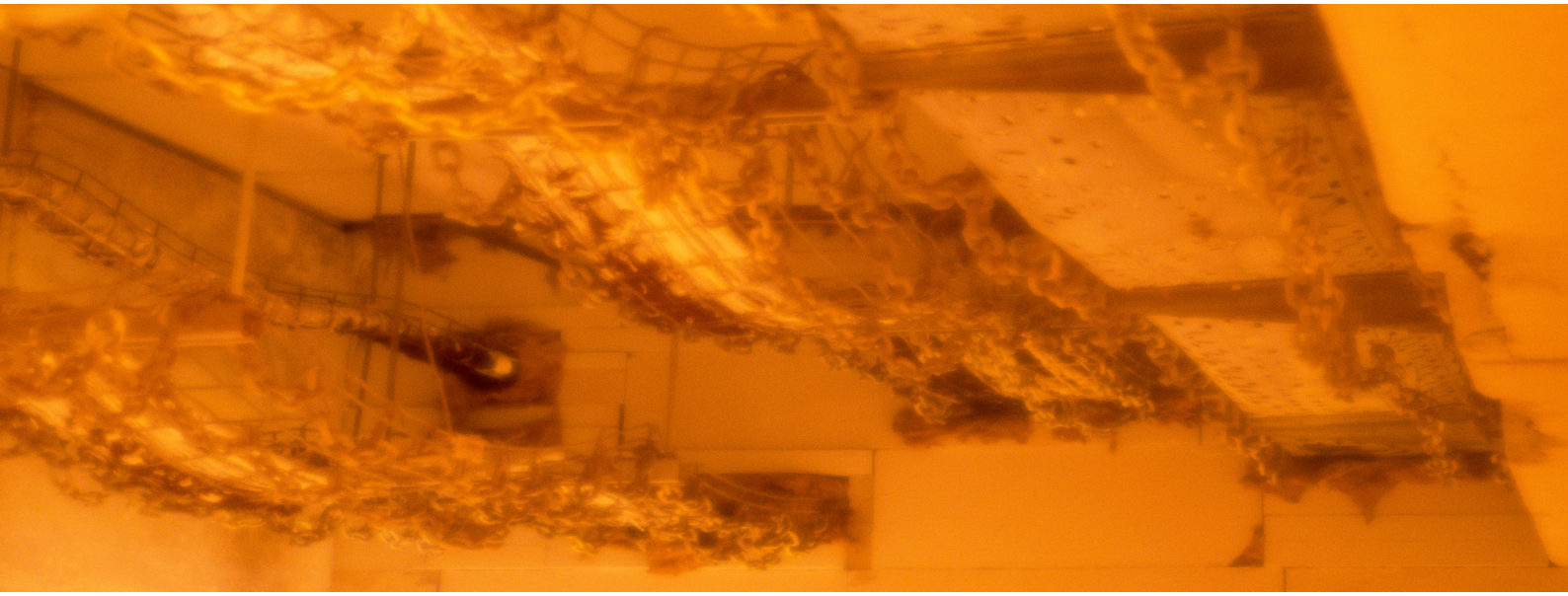
BASOR CABLE TRAYS AGAINST FIRE

As time goes on, the cable trays get deformed **while continuing to support the cables,** the cable coating wears off but the assembly maintains the electrical signal without short circuiting or interrupting the signal. Depending on the time, in minutes, which is capable of maintain the installation in service, it is classified as **E30, E60 or E90**. The selection of the installation (E30, E60 or E90) will depend on the time necessary to organize the evacuation and the emergency services in each case.

Clasificación Classification	Tiempo de ensayo (min) Time test (min)	Temperatura alcanzada Temperatura reached (°C)
E30	30	822
E60	60	925
E90	90	986

* The installations classified as Fire Resistant have been tested in accredited external laboratories, which allows to ensure compliance with all the requirements demanded in the Regulation.
** In addition, some of the assemblies have been subsequently evaluated and certified by VEIKI, thus being certified for use and installation in Hungary.



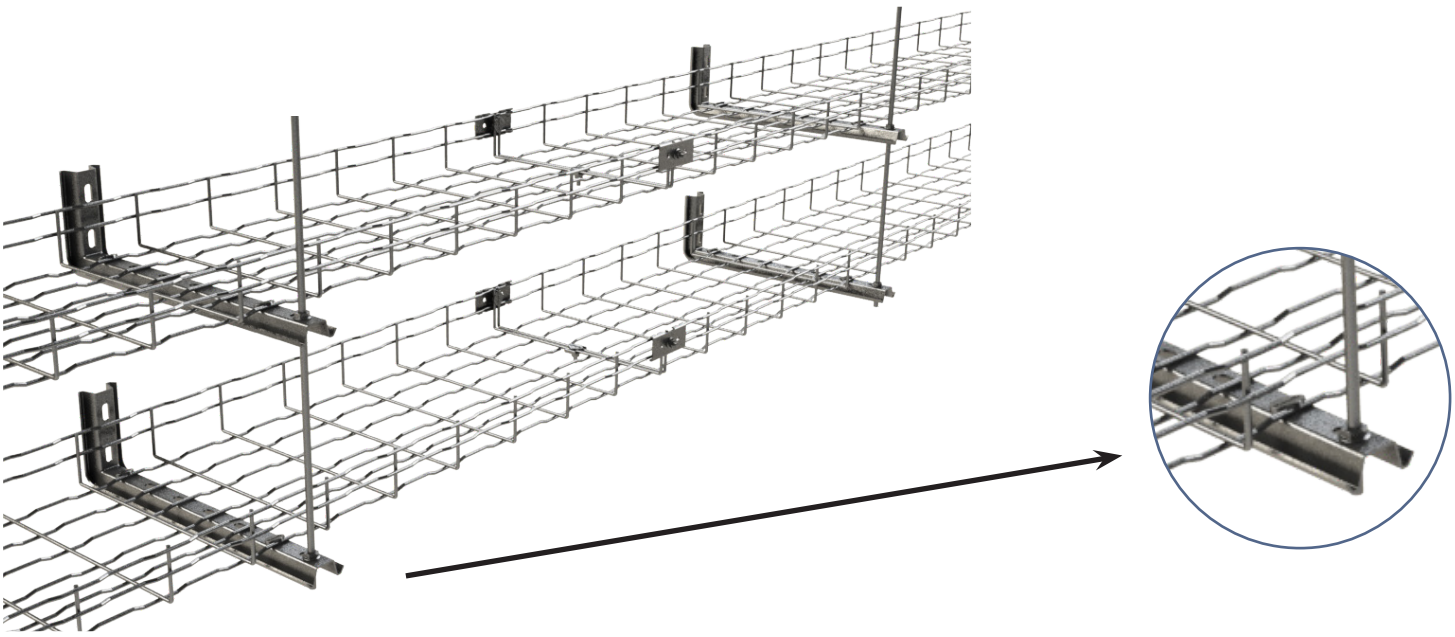


FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF01.00

E90

Basket tray BFR, high 65mm (2”).
Mounted at wall/roof using threated rods and SHO supports



BASOR ELECTRIC S.A. certifies that:

* The system RF01.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BFR with a maximum width of 300mm (12”), with the coating EZ/HDG, with supports SHO, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	65mm (2”)
Width	300mm (12”)

OPTIONAL MATERIALS IN THE ASSEMBLY		
Variable Set 4182CV	1 u	1 u
Nut DIN6923 M8	2 u	2 u

LIST OF MATERIALS AT EACH SUPPORT		
Srew B1	2 u	4 u
Staple CGBF	2 u	4 u
Support SHO	1 u	2 u
PSHO	1 u	2 u
Threated rod VRM8	1 u	1 u
Nut DIN6923 M8	2 u	4 u

LIST OF MATERIALS AT EACH CABLE TRAY		
Basorfil BFR	3 m	6 m
Staple CGBF	1 u	2 u
Union CULA	2 u	4 u

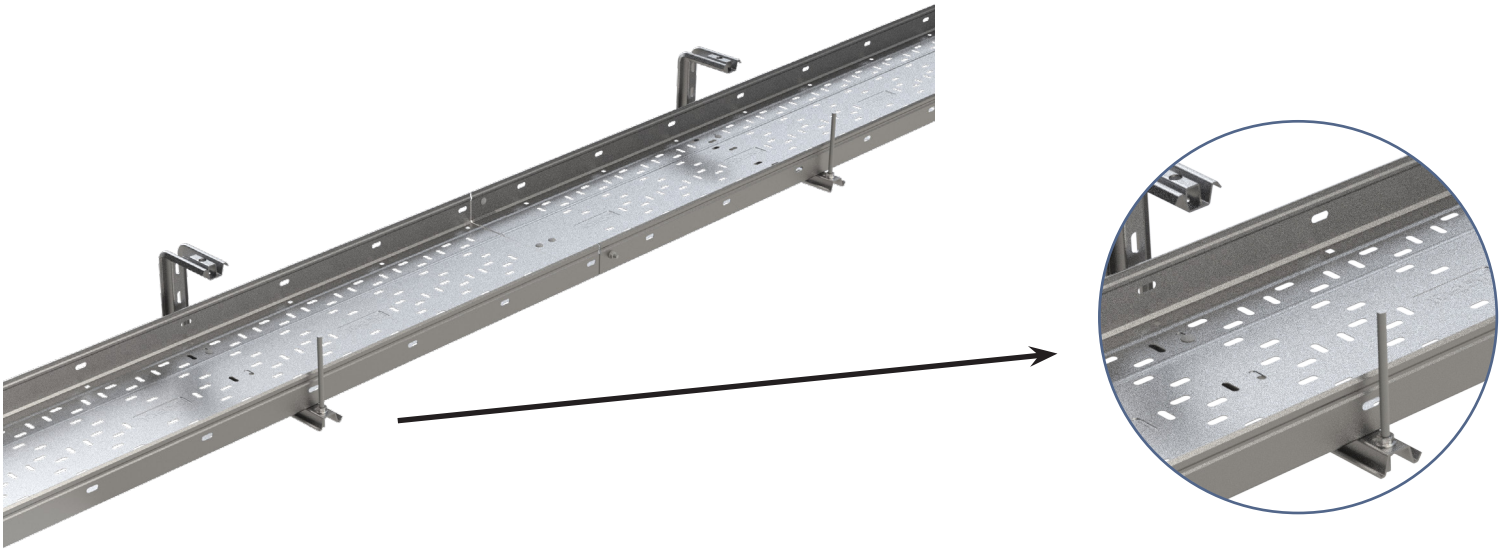
CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Result**
Nexans	2x2x0,8mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E30
EUPEN Kablewerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm²RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF02.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at roof using threated rods and SHOT supports



BASOR ELECTRIC S.A. certifies that:

* The system RF02.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHOT, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (12”)

OPTIONAL MATERIALS IN THE ASSEMBLY	
Variable Set 4182CV	1 u
Nut DIN6923 M8	2 u

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Support SHOT	1 u
PSHO	1 u
Threated rod VRM8	1 u
Nut DIN6923 M8	2 u

LIST OF MATERIALS AT EACH CABLE TRAY	
Basortray ERE	3 m
Screw B1	4 u

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Nexans	2x2x0,8mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E90
EUPEN Kablewerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm²RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

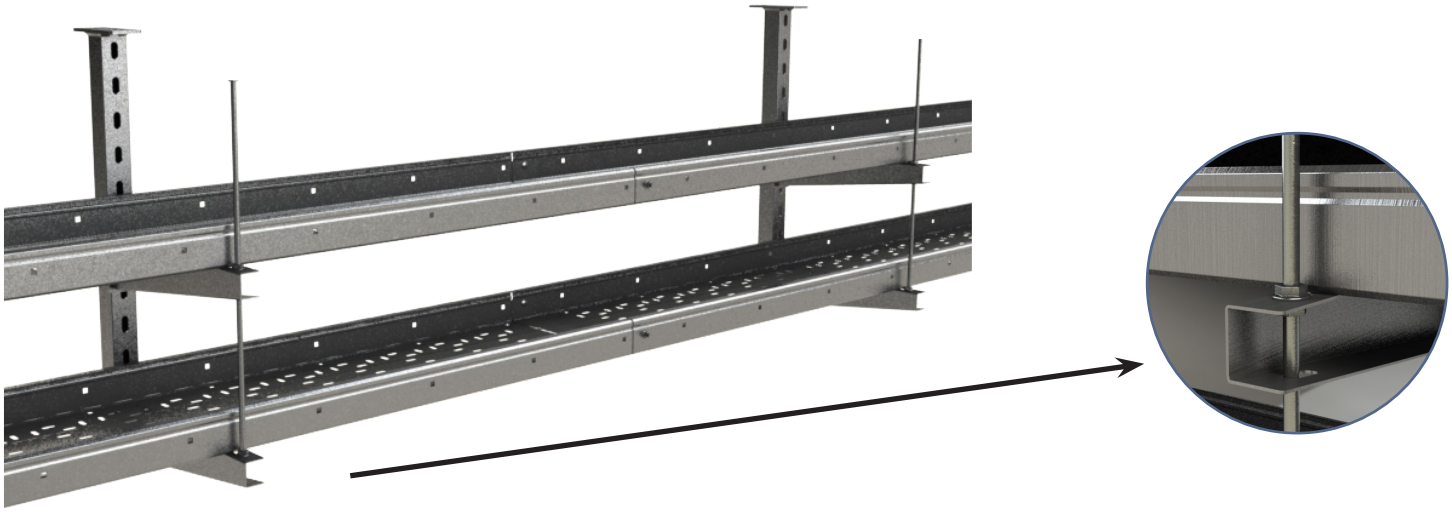
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF03.00

E90

Cable tray FRE, high 60mm (2”).
Mounted at roof using threated rods and SHL & SPL supports



BASOR ELECTRIC S.A. certifies that:

* The system RF03.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY FRE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHL & SPL, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
Support SHL	1 u	2 u
Support SPL	1 u	1 u
Threated Rod VRM8	1 u	1 u
Nut DIN6923 M8	2 u	4 u
Screw DIN933 M10x30	2 u	4 u
Spring Nut TM41 M10	2 u	4 u

OPTIONAL MATERIALS IN THE ASSEMBLY		
Variable Set 4182CV	1 u	1 u
Nut DIN6923 M8	2 u	2 u

LIST OF MATERIALS AT EACH CABLE TRAY		
Basortray FRE	3 m	6 m
Screw B1	4 u	8 u

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Nexans	2x2x0,8mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E30
EUPEN Kablewerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm²RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

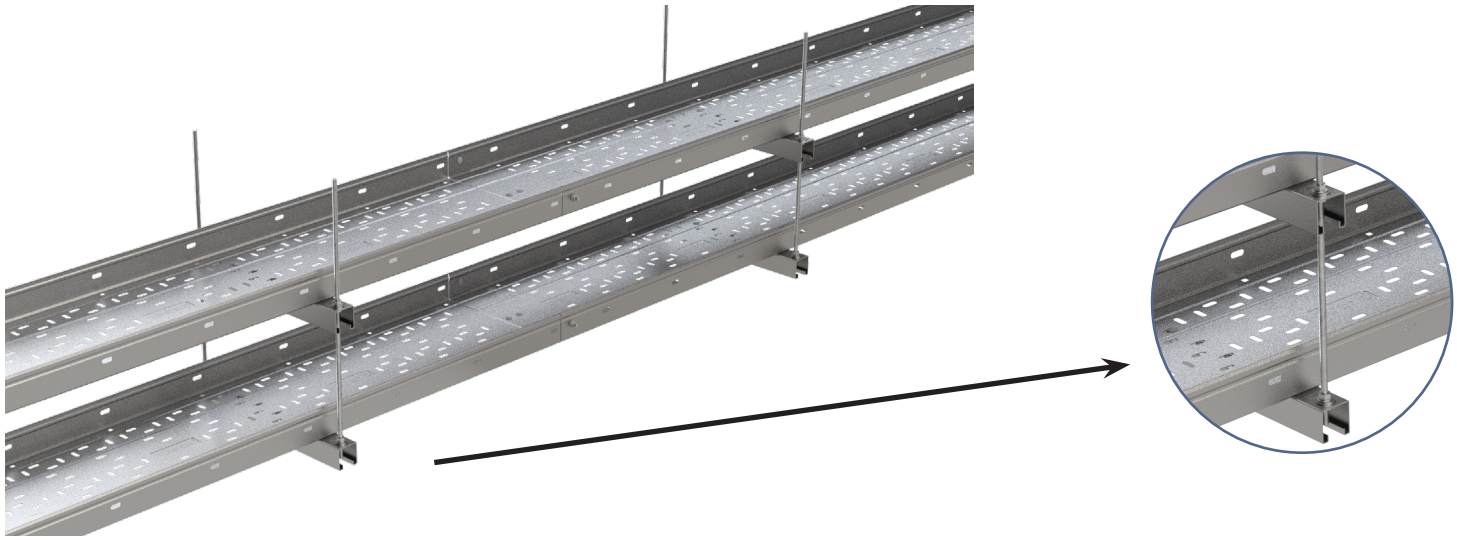
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF04.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at roof using threated rods and 41x41 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF04.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with profiles 41x41, threated rods VRM10 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
P41 41X41	0,4 m	0,8 m
Threated rod VRM10	1 u	1 u
Nut DIN934 M10	2 u	4 u

LIST OF MATERIALS AT EACH TRAY		
Basorfil ERE	3 m	6 m
Screw B1	4 u	8 u

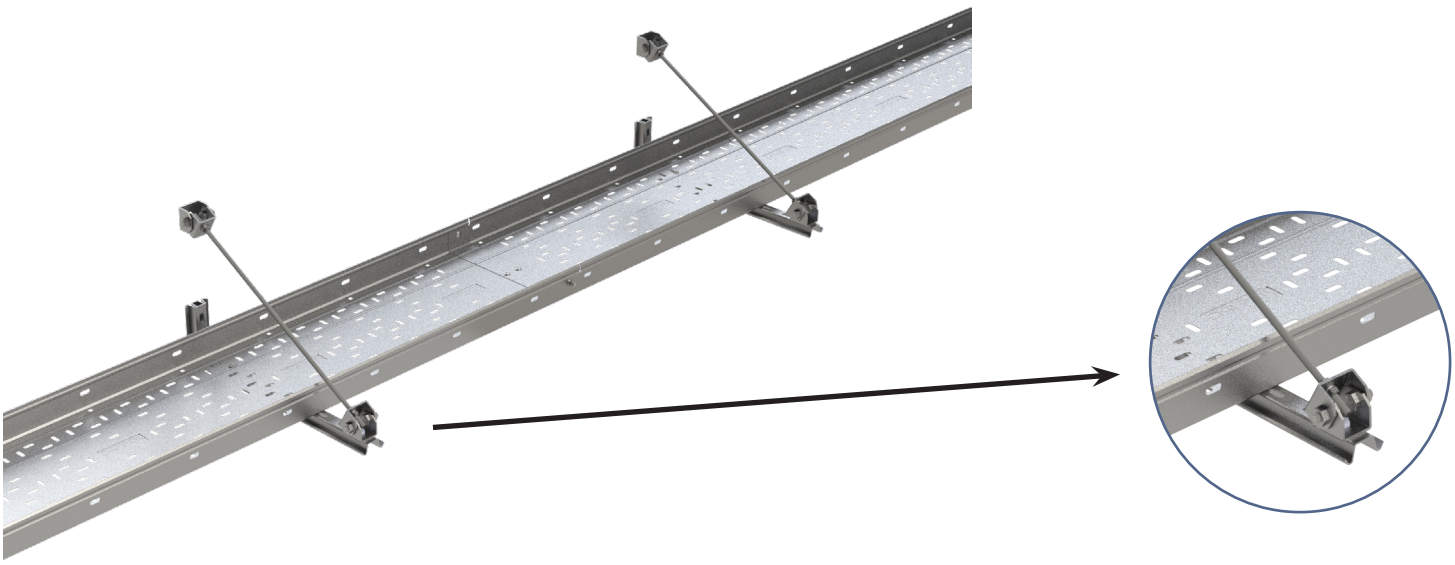
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Veiki	Up	Down
Nexans	2x2x0,8 mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	608/VNL	E90	E30
EUPEN kabelwerk AG	4x1,5 mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	608/VNL	E90	E60
Prysmian	4X16 mm² RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	608/VNL	E90	E60
EUPEN kabelwerk AG	4x1,5 mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	608/VNL	E60	E30
EUPEN kabelwerk AG	4x16 mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	608/VNL	E90	E90
EUPEN kabelwerk AG	4x50 mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	608/VNL	E90	E90
EUPEN kabelwerk AG	2x2x0,8 mm²	EUCASAFE JE-H(St)H...Bd FE 180 E90	Signal	DIN 4102-12	608/VNL	E30	E90
Lamela Electric, a.s.	2x2x0,8 mm²	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	CSN730895 / STN920205	608/VNL	-	P90-R
Lamela Electric, a.s.	4x1,5 mm² RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	CSN730895 / STN920205	608/VNL	-	P60-R
Lamela Electric, a.s.	4x16 mm² RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	CSN730895 / STN920205	608/VNL	P15-R	P60-R
Nkt cables	4x1,5 mm² RE	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	CSN730895 / STN920205	608/VNL	P15-R	-
Nkt cables	4x50 mm² SM	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	CSN730895 / STN920205	608/VNL	P60-R	-

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF05.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at wall using threated rods and SHO supports



BASOR ELECTRIC S.A. certifies that:

* The system RF05.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHO, threated rods VRM8, variable set 4182CV and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Support SHO	1 u
PSHO	1 u
Threated rdo VR8	1 u
Nut DIN6923 M8	5 u
Screw DIN933 M8x25	1 u
Variable set 4182VS	2 u

LIST OF MATERIALS AT EACH CABLE TRAY	
Basortray ERE	3 m
Srew B1	4 u

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Nexans	2x2x0,8mm^2	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E90
EUPEN Kablewerk AG	4x1,5mm^2 RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm^{2}RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

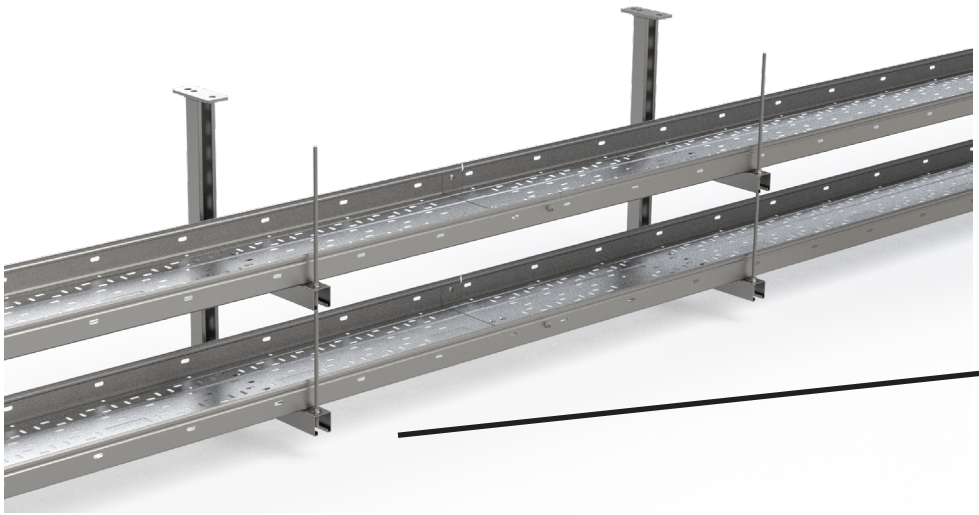
BEBasor
CABLE TRAY SPECIALIST

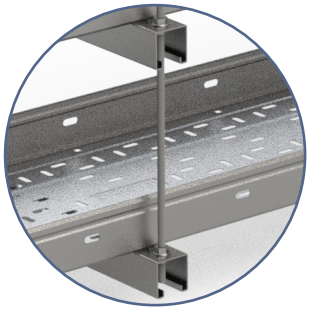
FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF06.00

E90

Cable tray FRE, high 60mm (2”).
Mounted at roof using threated rods and SHL & SPL supports





BASOR ELECTRIC S.A. certifies that:

* The system RF06.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY FRE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHL & SPL, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
Support SHL	1 u	2 u
Support SPL	1 u	1 u
Threated rod VR8	1 u	1 u
Nut DIN6923 M8	2 u	4 u
Nut DIN633 M10x30	2 u	4 u
Spring nut TM41 M10	2 u	4 u

OPTIONAL MATERIALS IN THE ASSEMBLY		
Variable Set 4182CV	1 u	1 u
Nut DIN6923 M8	2 u	2 u

LIST OF MATERIALS AT EACH CABLE TRAY		
Basortray FRE	3 m	6 m
Screw B1	4 u	8 u

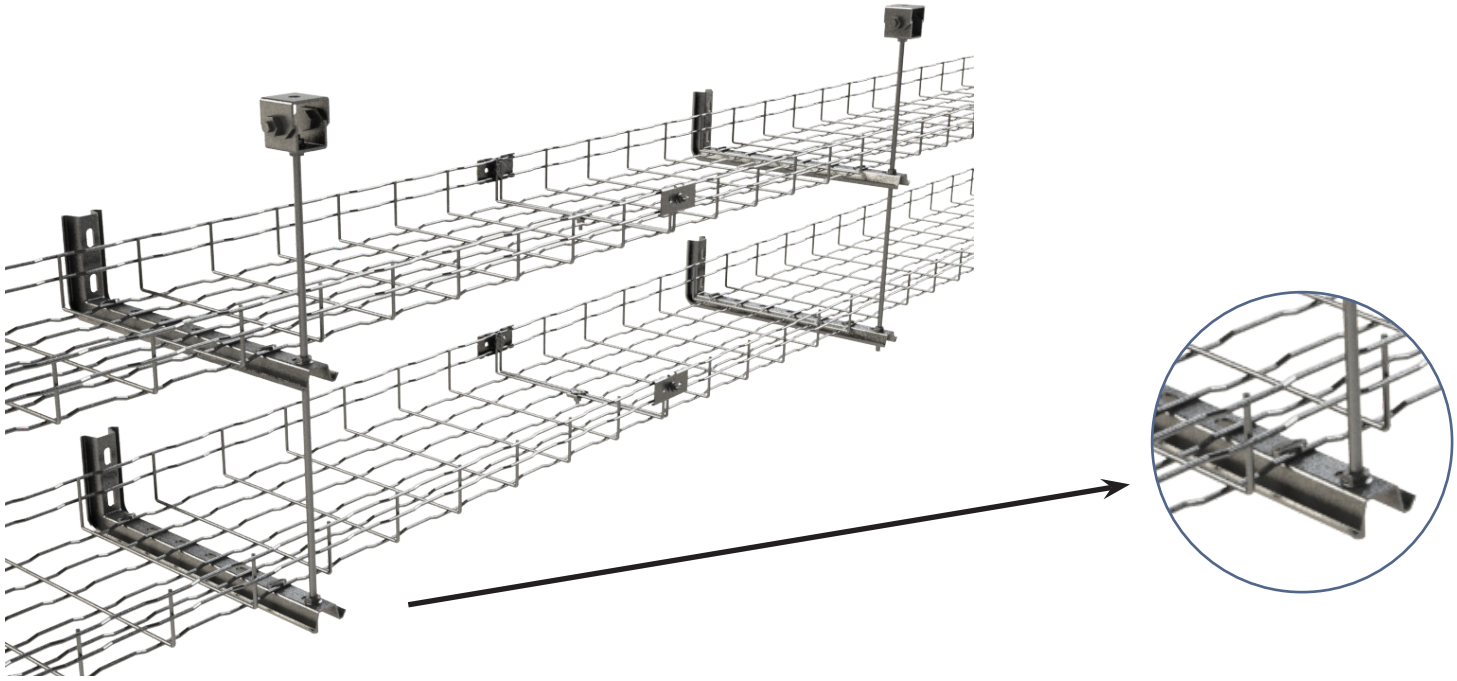
CABLES FOR THE TEST						
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Up**	**Down**
Nexans	2x2x0,8mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E60	E30
EUPEN Kablewerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E60	E30
Prysmian	4x16mm²RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E60	E30

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF07.00

E90

Basket tray BFR, high 65mm (2”).
Mounted at wall using threated rods and SHO supports



BASOR ELECTRIC S.A. certifies that:

* The system RF07.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed belowkeeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BFR with a maximum width of 300mm (12”), with the coating EZ/HDG, with supports SHO, threated rods VRM8 and variable set 4182CV and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Staple GBF	2 u	4 u
Screw B1	2 u	4 u
Support SHO	1 u	2 u
PSHO	1 u	2 u
Threated rod VR8	1 u	2 u
Nut DIN6923 M8	5 u	6 u
Screw DIN933 M8x25	1 u	0 u
Variable Set 4182CV	2 u	2 u

LIST OF MATERIALS AT EACH TRAY		
Basorfil BFR	3 m	6 m
Union CULA	2 u	4 u
Staple CGBF	1 u	2 u

CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Result**
Nexans	2x2x0,8mm^2	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E90
EUPEN Kablewerk AG	4x1,5mm^2 RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E60
Prysmian	4x16mm^{2}RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E30

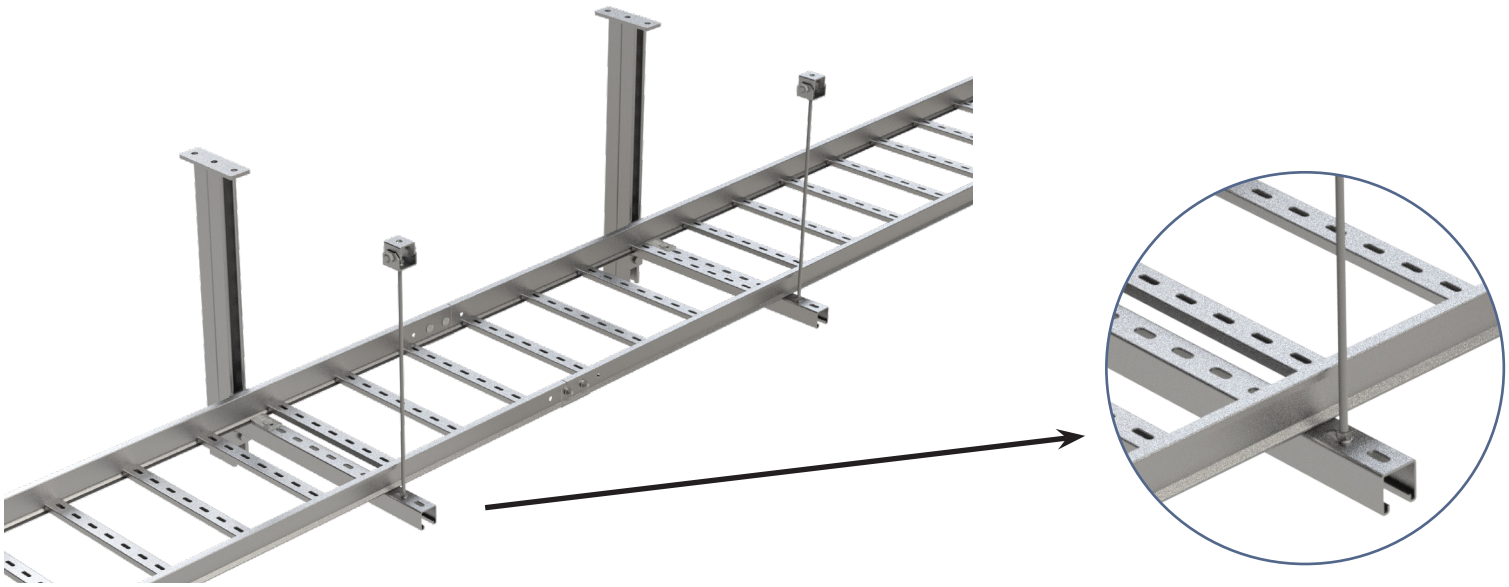
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF08.00

E90

Cable ladder FE, high 60mm (2”). Mounted at roof using threated rods and SP & SPD supports



BASOR ELECTRIC S.A. certifies that:

* The system RF08.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable ladder BASORTRAV FE with a maximum width of 400mm (16”), with the coating HDG, with supports SP & SPD, threated rods VRM8 and has been tested for a Safe working load of 20 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	20 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	400mm (16”)

LIST OF MATERIALS AT EACH SUPPORT	
BFE	2 u
nut DIN933 M10X30	4 u
Spring nut TM41 M10	4 u
Support SP	1 u
Support SPD	1 u
Nut DIN6923 M8	2 u
Threated rod VRM8	1 u

OPTIONAL MATERIALS IN THE ASSEMBLY	
Variable Set 4182CV	1 u
Nut DIN6923 M8	2 u

LIST OF MATERIALS AT EACH TRAY	
Basortrav FE	3 m
Screw B2	4 u

CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Result**
Nexans	2x2x0,8mm^2	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E90
EUPEN Kablewerk AG	4x1,5mm^2 RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E30
Prysmian	4x16mm^{2}RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E30

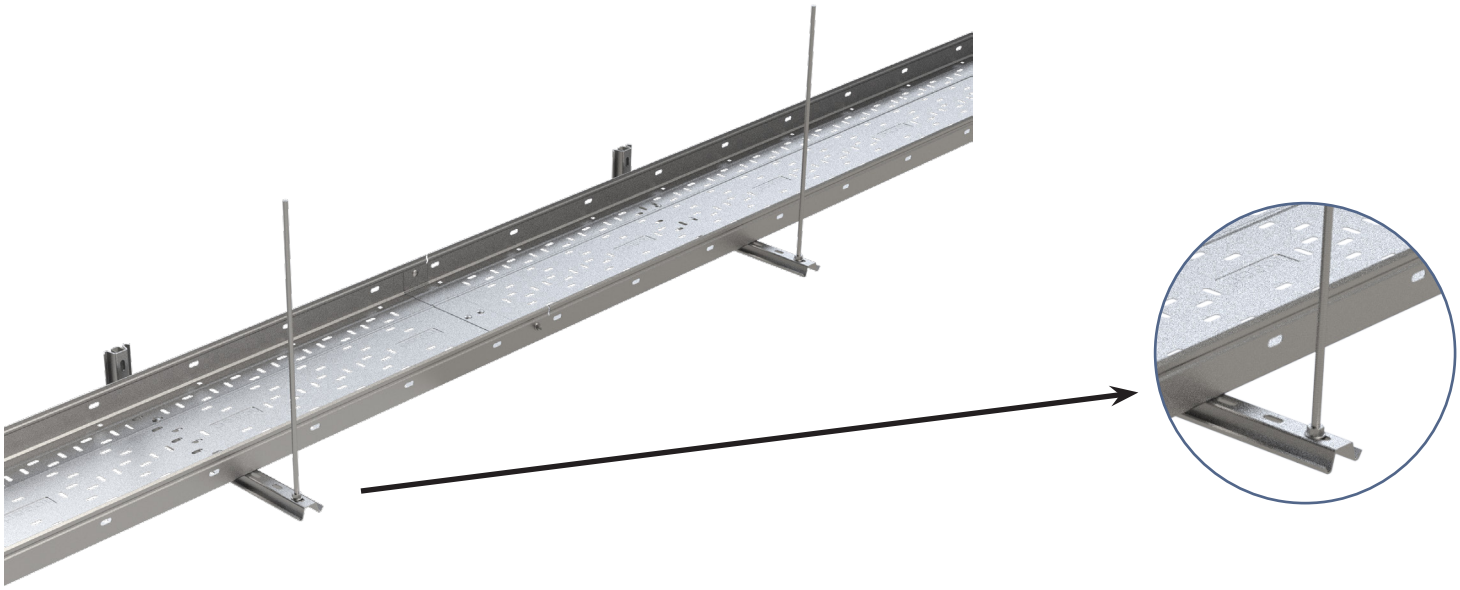
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF09.00

E90

Cable tray ERE, high 60mm (2”). Mounted at roof using threated rods and SHO supports



BASOR ELECTRIC S.A. certifies that:

* The system RF09.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHO, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Support SHO	1 u
PSHO	1 u
Threated rod VR8	1 u
Nut DIN6923 M8	2 u

OPTIONAL MATERIALS IN THE ASSEMBLY	
Variable Set 4182CV	1 u
Tuerca DIN6923 M8	2 u

LIST OF MATERIALS AT EACH TRAY	
Basortray ERE	3 m
Screw B1	4 u

CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Result**
Nexans	2x2x0,8mm^2	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E90
EUPEN Kablewerk AG	4x1,5mm^2 RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm^{2}RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

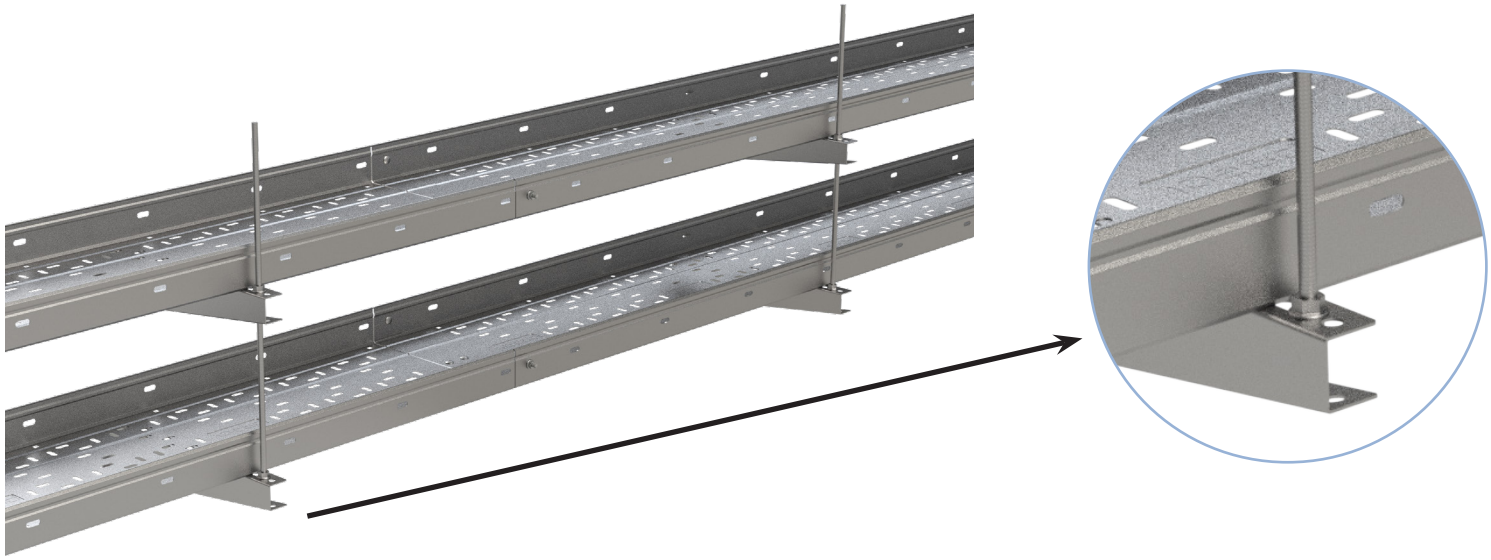
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF010.00

E90

Cable tray FRE, high 60mm (2”).
Mounted at wall/roof using threated rods and SHL supports



BASOR ELECTRIC S.A. certifies that:

* The system RF10.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY FRE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SHL, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
Support SHL	1 u	2 u
Threated Rod VR8	1 u	1 u
Nut DIN6923 M8	2 u	4 u

OPTIONAL MATERIALS IN THE ASSEMBLY		
Variable Set 4182CV	1 u	1 u
Nut DIN6923 M8	2 u	2 u

LIST OF MATERIALS AT EACH TRAY		
Basortray FRE	2 u	4 u
Screw B1	1 u	2 u

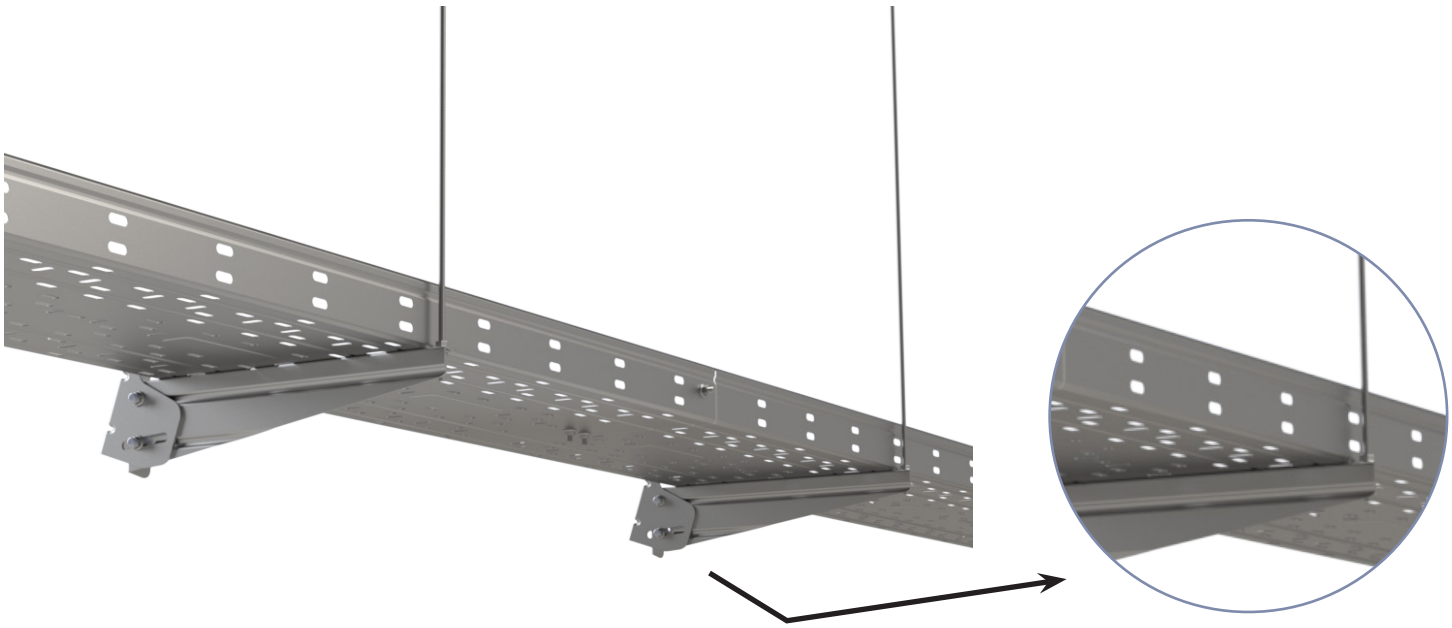
CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**Standard**	**Result**
Nexans	2x2x0,8mm²	RHEYHALON JE-H(St)H E30-E90	Signal	DIN 4102-12	E30
EUPEN Kablewerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	E90
Prysmian	4x16mm²RE	Sienopyr-plus (N)HXHX E90	Power	DIN 4102-12	E90

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF11.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at wall/inclinated wall using articulated wall bracket and SCR supports



BASOR ELECTRIC S.A. certifies that:

* The system RF11.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with articulated wall bracket KS, supports SCR and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Support SCR	1 u
Wall bracket KS 50-400	1 u
Screw B2	2 u
Threated rod M6	1 u
DIN6923 M6	4 u
Variable set 4182CV	1 u

LIST OF MATERIALS AT EACH TRAY	
Basortray ERE	3 m
Screw B1	3 u

CABLES FOR THE TEST

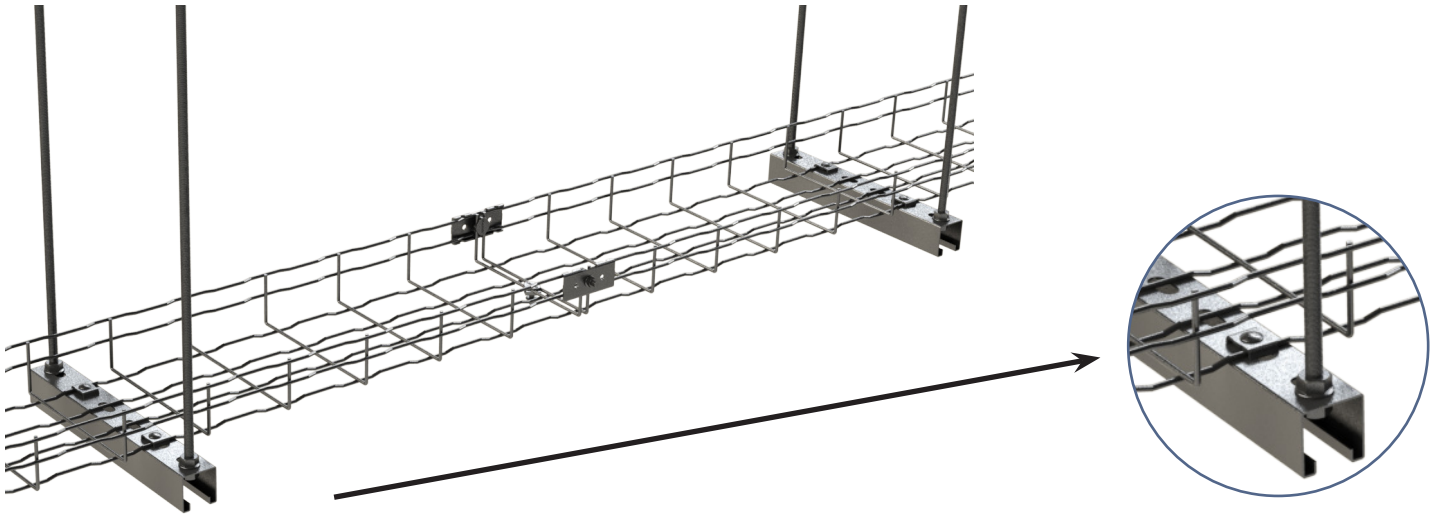
Manufacturer	Section	Cable refference	Type	Standard	Veiki	Result
EUPEN kabelwerk AG	4x50mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	609/VNL	E90
EUPEN kabelwerk AG	4x16mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	609/VNL	E90
EUPEN kabelwerk AG	2x2x0,8mm²	EUCASAFE JE-H(St)H...Bd FE 180 E90	Signal	DIN 4102-12	609/VNL	E60

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF12.00

E90

Basket tray BFR, high 65mm (2”).
Mounted at roof using threated rods and 41x41 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF12.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BFR with a maximum width of 300mm (12”), with the coating EZ/HDG, with profiles 41x41, threated rods VRM10 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Staple GBF	2 u
Washer DIN9021 M6	2 u
Profile P41 41x41x1,5	0,4 m
Threated rod VR10	2 u
Nut DIN934 M10	4 u
Washer DIN125 M10	4 u

LIST OF MATERIALS AT EACH SUPPORT	
Basorfil BFR	3 m
Union CULA	2 u
Staple CGBF	1 u

CABLES FOR THE TEST

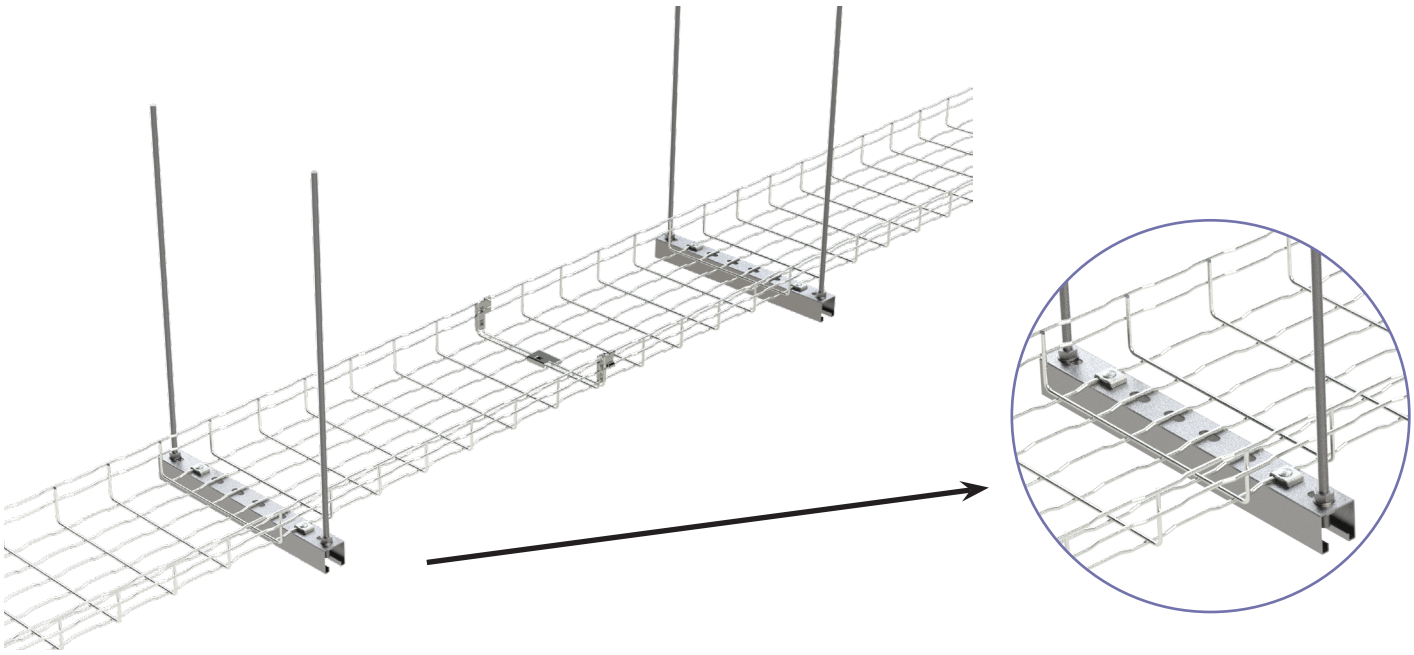
Manufacturer	Section	Cable refference	Type	Standard	Veiki	Result
EUPEN kabelwerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	610/VNL	E30
EUPEN kabelwerk AG	4x16mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	610/VNL	E90
EUPEN kabelwerk AG	4x50mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12	610/VNL	E90
EUPEN kabelwerk AG	2x2x0,8mm²	EUCASAFE JE-H(St)H...Bd FE 180 E90	Signal	DIN 4102-12	610/VNL	E60

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF13.00

E90

Basket tray BF2R, high 65mm (2”).
Mounted at roof using threated rods and 41x41 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF13.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 300mm (12”), with the coating EZ/Z1000, with profiles 41x41, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,1 m
Maximum load	10 kg/m
Maximum number of highs	1
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Staple GBF	2 u
Washer DIN9021 M6	2 u
Profile P41 41x41x1,5	0,4 m
Threated rod VRM10	2 u
Nut DIN934 M10	4 u
Washer DIN125 M10	4 u

LIST OF MATERIALS AT EACH SUPPORT	
Basorfil BF2R	3 m

CABLES FOR THE TEST

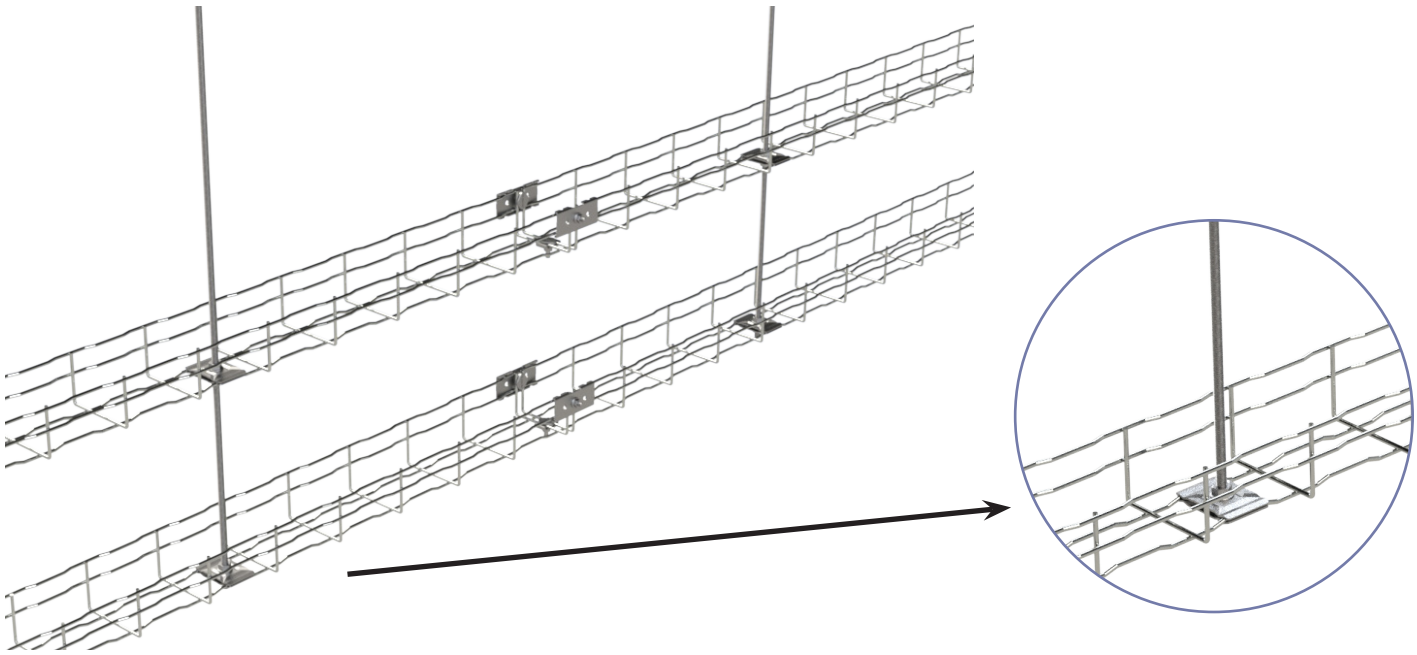
Manufacturer	Section	Cable refference	Type	Standard	Veiki	Result
EUPEN kabelwerk AG	4x16mm² RM	EUCASAFE NHXH FE 180 E90	Potencia	DIN 4102-12	611/VNL	E90
EUPEN kabelwerk AG	4x50mm² RM	EUCASAFE NHXH FE 180 E90	Potencia	DIN 4102-12	611/VNL	E90
EUPEN kabelwerk AG	2x2x0,8mm²	EUCASAFE JE-H(St)H...Bd FE 180 E90	Señal	DIN 4102-12	611/VNL	E90

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF14.00

E90

Basket tray BFR, 100x65mm (4x2”).
Mounted at wall using threated rods and SSC supports



BASOR ELECTRIC S.A. certifies that:

* The system RF14.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BFR with a maximum width of 100mm (4”), with the coating EZ/HDG, with supports SSC, threated rods VRM8 and has been tested for a Safe working load of 5 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	5 kg/m
Maximum number of highs	2
High	65mm (2”)
Width	100mm (4”)

LIST OF MATERIALS AT EACH SUPPORT		
Support SSC	2 u	4 u
Threated Rod VR8	1 u	1 u
Nut DIN6923 M8	2 u	4 u

LIST OF MATERIALS AT EACH TRAY		
Basorfil BFR	3 m	6 m
Union CULA	2 u	4 u
Staple CGBF	1 u	2 u

CABLES FOR THE TEST

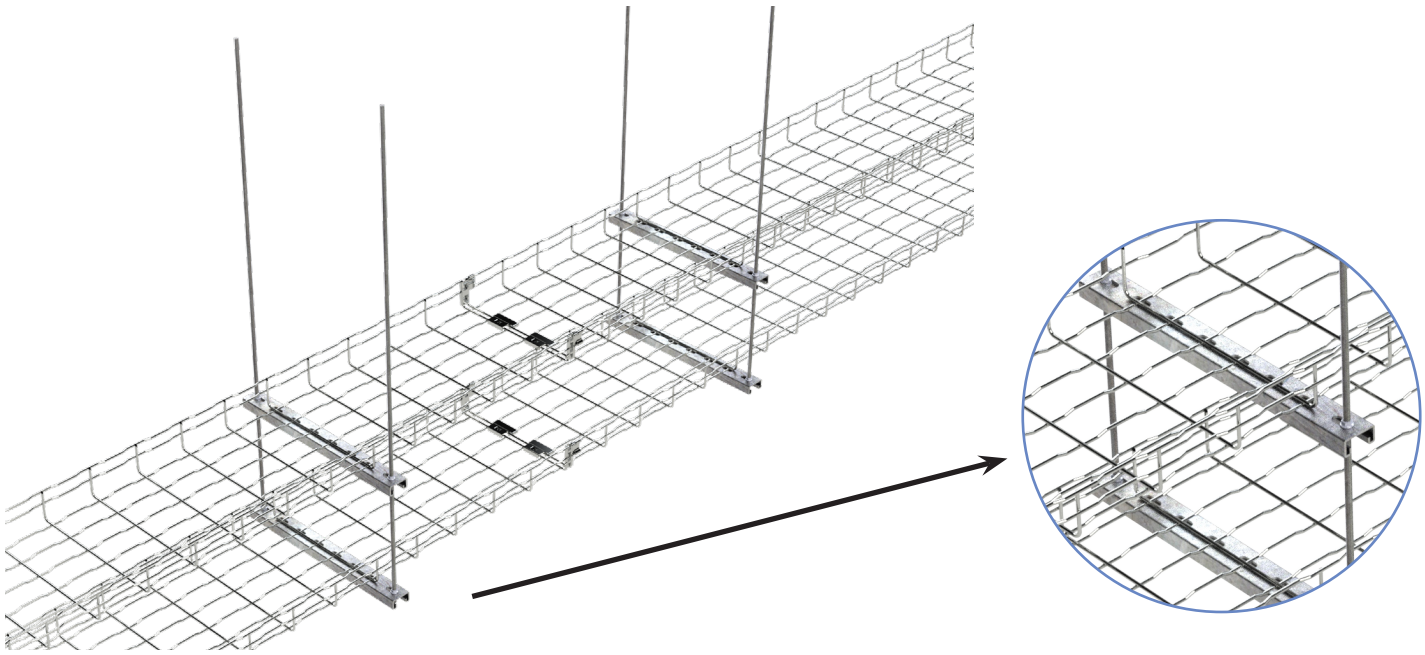
Manufacturer	Section	Cable refference	Type	Standard	Veiki	Result
EUPEN kabelwerk AG	4x1,5mm² RE	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	612/VNL	E90
EUPEN kabelwerk AG	4x16mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	612/VNL	E90
EUPEN kabelwerk AG	4x50mm² RM	EUCASAFE NHXH FE 180 E90	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	612/VNL	E90
EUPEN kabelwerk AG	2x2x0,8mm²	EUCASAFE JE-H(St)H...Bd FE 180 E90	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	612/VNL	E60

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF15.00

E90

Basket tray BF2R, high 65mm (2”).
Mounted at roof using threated rods and 41x21 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF15.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 300mm (12”), with the coating EZ/EZ1000, with supports 41X21, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* CSN 73 0895
* STN 92 0205

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Staple CGBF	2 u	4 u
Nut DIN9021 M6	2 u	4 u
Profile P41 41x21x2,5	0,4 m	0,4 m
Threated rod VR8	2 u	2 u
Nut DIN6923 M8	4 u	8 u
Screw B1	2 u	4 u

LIST OF MATERIALS AT EACH TRAY		
Basorfil BF2R	3 m	6 m

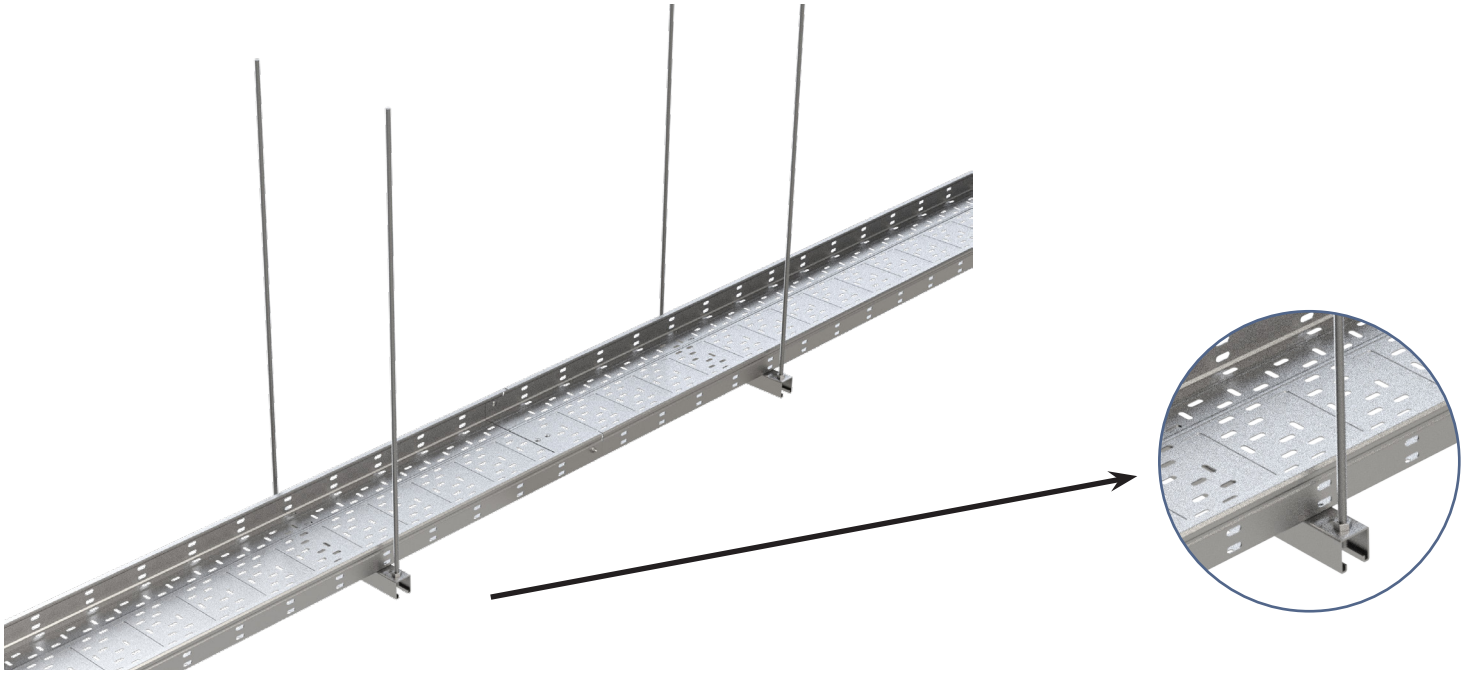
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	4x1,5mm² RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	CSN 73 0895, STN 92 0205	P30-R
Lamela Electric, a.s.	4x16mm²RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	CSN 73 0895, STN 92 0205	P15-R
Nkt cables	4x1,5mm² RE	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	CSN 73 0895, STN 92 0205	P30-R
Nkt cables	4x50mm² SM	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	CSN 73 0895, STN 92 0205	P60-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF16.00

E90

Cable tray FRE, high 60mm (2”).
Mounted at roof using threated rods and 41x41 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF16.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY FRE with a maximum width of 300mm (12”), with the coating PG/HDG, with profiles 41x41, threated rods VRM10 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Profile P41 41X41X2,5	0,4 m
Threated rod VR10	2 u
Nut DIN934 M10	4 u

LIST OF MATERIAL AT EACH TRAY	
Basortray FRE	3 m
Screw B1	4 u

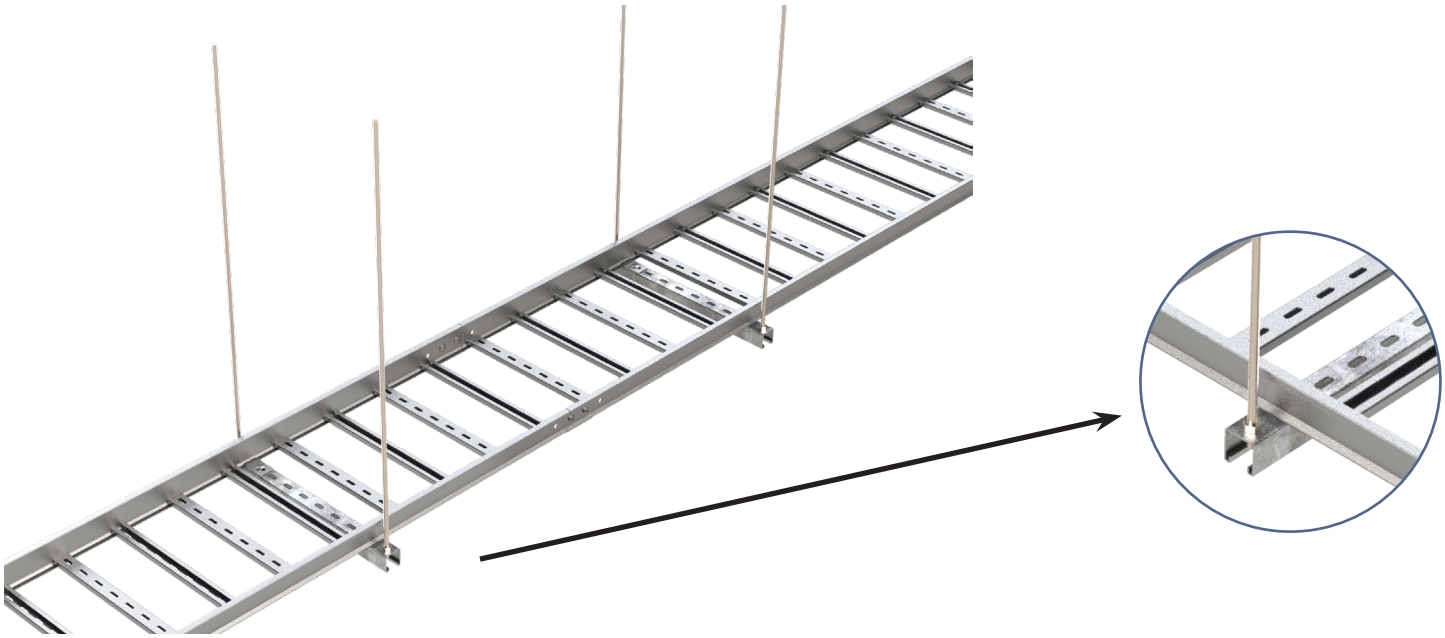
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R
Lamela Electric, a.s.	4x16mm^{2}RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF17.00

E90

Cable ladder FE, high 60mm (2”). Mounted at roof using threated rods and 41x41 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF17.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable ladder BASORTRAV FE with a maximum width of 400mm (12”), with the coating HDG, with profiles 41x41, threated rods VRM10 and has been tested for a Safe working load of 20 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	20 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (16”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B2	2 u
Profile P41 41X41X2,5	0,5 m
Threated rod VRM10	2 u
Nut DIN934 M10	4 u
BFE 6/8	2 u

LIST OF MATERIALS AT EACH TRAY	
Basortrav FE	3 m
Screws B2	4 u

CABLES FOR THE TEST

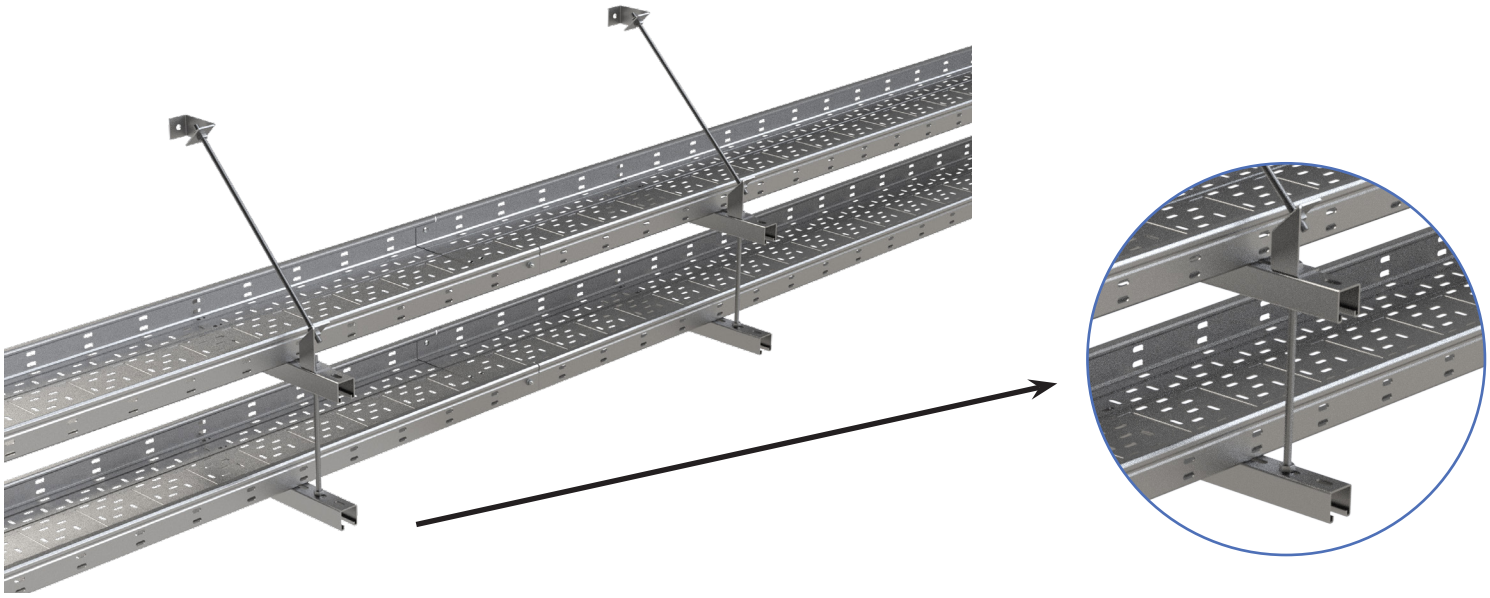
Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P30-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P30-R
Lamela Electric, a.s.	4x16mm^{2}RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF018.00

E90

Cable tray FRE, high 60mm (2”).
Mounted at wall using threated rods and SP supports



BASOR ELECTRIC S.A. certifies that:

* The system RF18.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY FRE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SP, threated rods VR10 and a special piece PFV45, all has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
Support SP	1 u	2 u
Threated rod VR10	1 u	1 u
Nut DIN934 M10	2 u	4 u
Screw B3	1 u	0 u
PFV45	2 u	2 u

LIST OF MATERIALS AT EACH TRAY		
Basortray FRE	3 m	6 m
Screw B1	4 u	8 u

CABLES FOR THE TEST

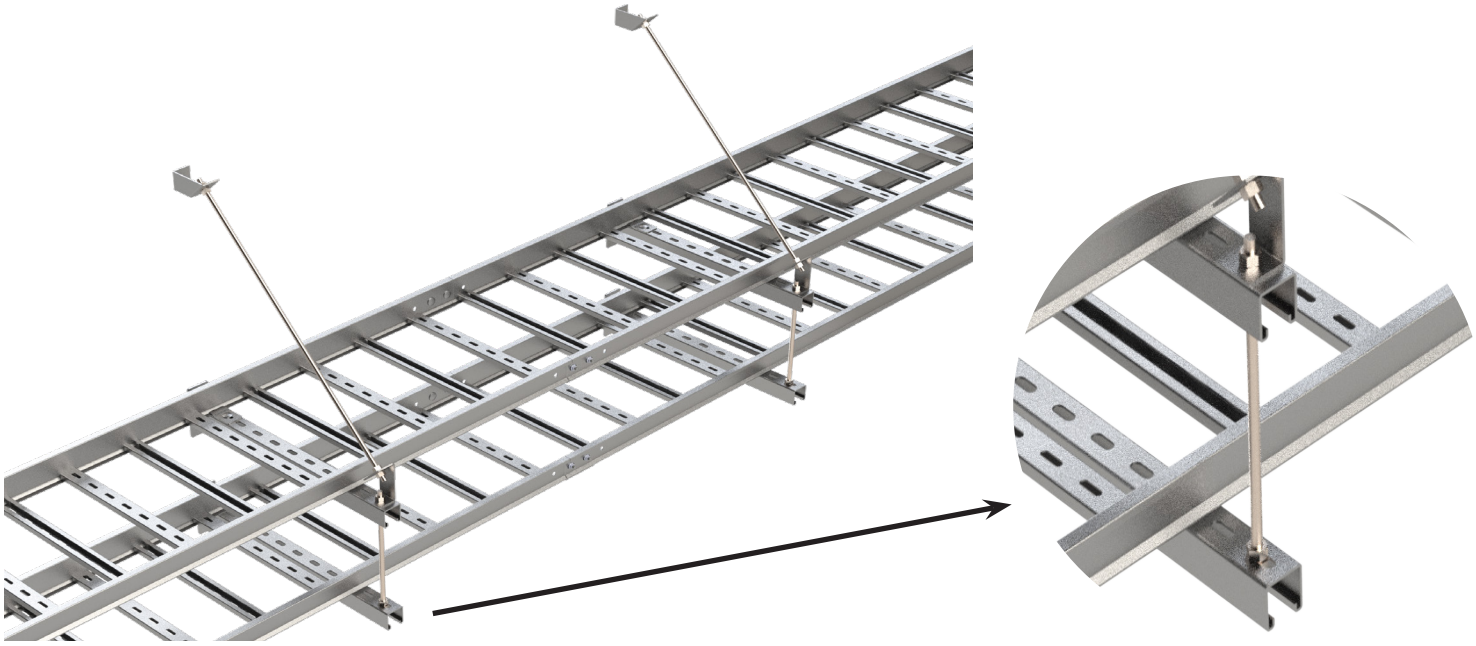
Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P90-R
Lamela Electric, a.s.	4x16mm^{2}RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R
Nkt cables	4x1,5mm^2 RE	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R
Nkt cables	4x50mm^2 SM	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF20.00

E90

Cable ladder FE, high 60mm (2”).
Mounted at wall using threated rods and SP supports



BASOR ELECTRIC S.A. certifies that:

* The system RF20.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable ladder BASORTRAV FE with a maximum width of 400mm (16”), with the coating HDG, with supports SP, threated rods VR10 and a special piece PFV45, all has been tested for a Safe working load of 20 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:
* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	20 kg/m
Maximum number of highs	2
High	60mm (2”)
Width	400mm (16”)

LIST OF MATERIALS AT EACH SUPPORT		
Screw B1	2 u	4 u
Support SP	1 u	2 u
Threated rod VR10	1 u	1 u
Nut DIN934 M10	4 u	8 u
Screw B3	1 u	0 u
PFV45	2 u	2 u
BFE M6/8	2 u	4 u

LIST OF MATERIALS AT EACH TRAY		
Basortrav FE	3 m	6 m
Screw B2	4 u	8 u

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P45-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P45-R
Lamela Electric, a.s.	4x16mm^{2}RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R
Nkt cables	4x1,5mm^2 RE	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R
Nkt cables	4x50mm^2 SM	NOPOVIC 1-CXKH-V FE180/P90-R, B2ca,s1,d0,a1	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R

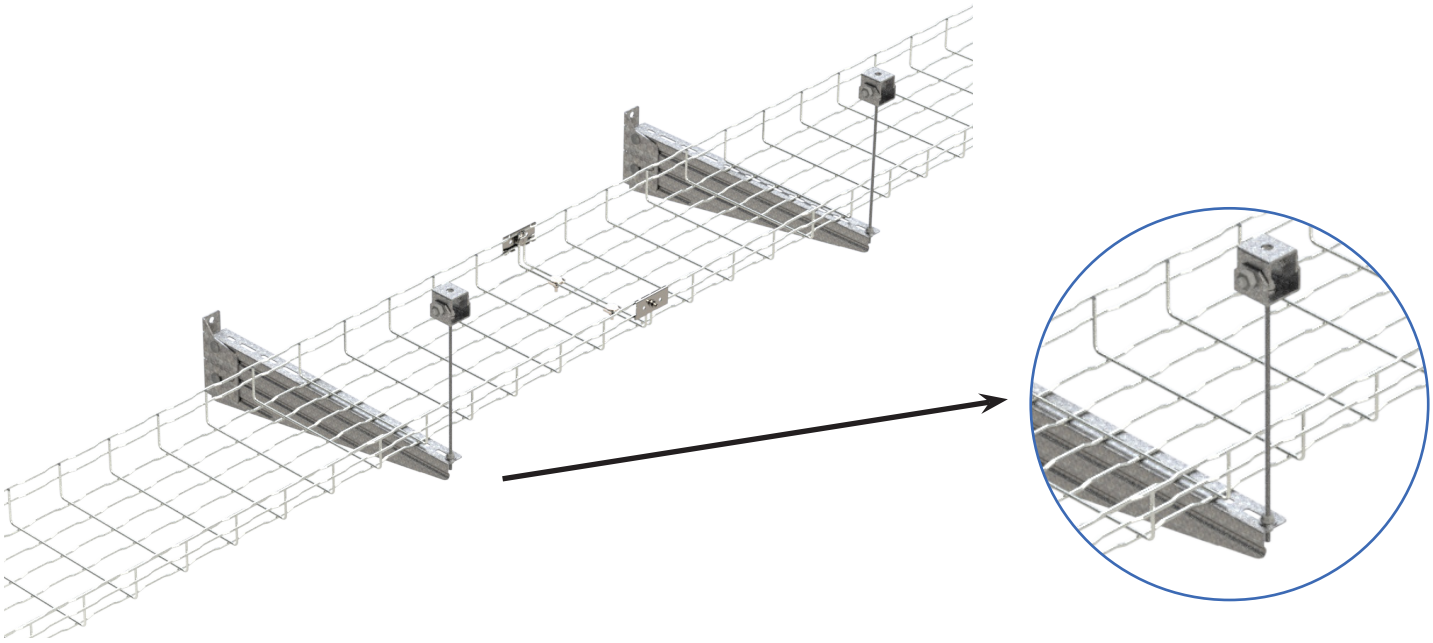
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF21.00

E90

Basket tray BFR, high 65mm (2”).
Mounted at wall using threated rods, articulated wall brackets and SCR supports



BASOR ELECTRIC S.A. certifies that:

* The system RF21.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BFR with a maximum width of 300mm (12”), with the coating Stainless Steel i3016, with supports SCR, threated rods VRM6 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Staple GBF	2 u
Articulated bracket KS	1 u
Support SCR	1 u
Threated Rod VRM6	1 u
Nut DIN6923 M6	4 u
Screw B2	2 u
Variable Set 4182CV	1 u

LIST OF MATERIALS AT EACH TRAY	
Basorfil BFR	3 m
Union CULA	2 u
Nut DIN9021 M6	2 u

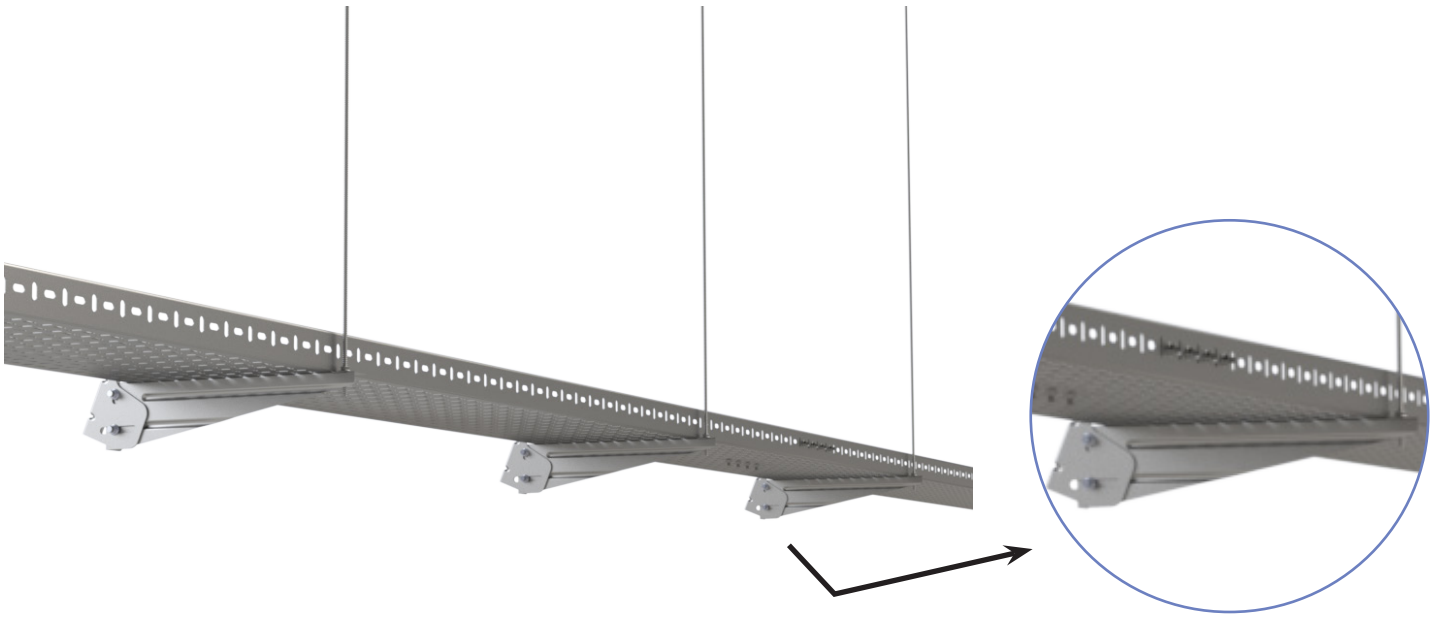
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P60-R
Lamela Electric, a.s.	4x16mm^2 RM	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P15-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF22.00

E90

Cable tray BS, high 50mm (2”).
Mounted at wall using threated rods, articulated wall brackets and SCR supports



BASOR ELECTRIC S.A. certifies that:

* The system RF22.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY BS with a maximum width of 300mm (12”), with the coating Stainless Steel i316, with supports SCR, threated rods VRM6 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	50 mm (2”)
Width	300 mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1	2 u
Variable Set 4182CV	1 u
Articulated bracket KS	1 u
Support SCR	1 u
Threated Rod VRM6	1 u
Nut DIN9021 M6	4 u
Screw B2	2 u

LIST OF MATERIALS AT EACH TRAY	
Basortray BS	3 m
Union JUBS	3 u
Screw B1	12 u

CABLES FOR THE TEST

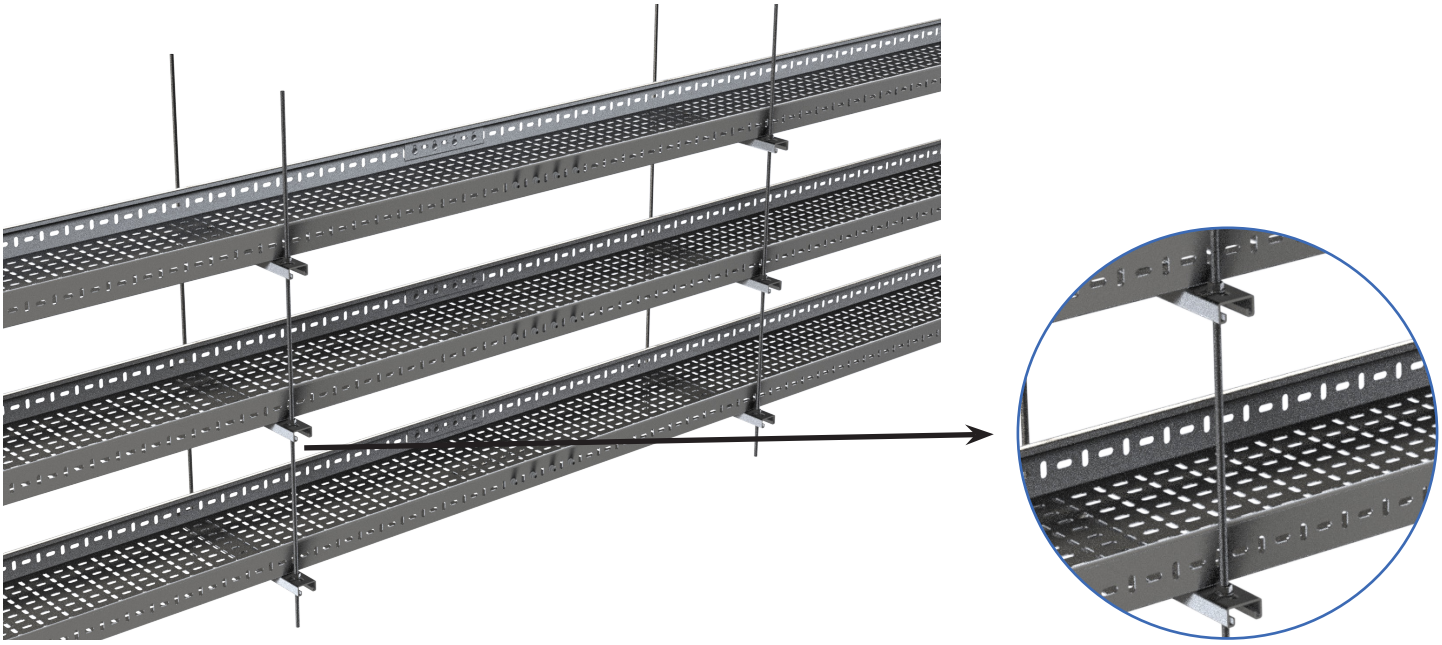
Manufacturer	Section	Cable refference	Type	Standard	Result
Lamela Electric, a.s.	2x2x0,8mm^2	JSFE-V FE180/P30-90-R B2ca,s1,d0,d1,a1 UV	Signal	DIN 4102-12, CSN 73 0895, STN 92 0205	P90-R
Lamela Electric, a.s.	4x1,5mm^2 RE	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P45-R
Lamela Electric, a.s.	4x16mm^2 RM	1-CSKE-V FE180/P90-R, B2ca,s1,d0,a1 UV	Power	DIN 4102-12, CSN 73 0895, STN 92 0205	P90-R

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF23.00

E90

Cable tray BS, high 60mm (2”).
Mounted at roof using threated rods and 41x21 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF23.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY BS with a maximum width of 300mm (12”), with the coating PG/HDG, with 41x21 profiles, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12
* CSN 73 0895 * STN 92 0205

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	3
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT			
Screw B1 M6x14	2 u	4 u	6 u
Washer DIN 9021 M6	2 u	4 u	6 u
Profile P41 41X21X2,5	0,4 m	0,8 m	1,2 m
Threated Rod VRM8	2 u	2 u	2 u
Nut DIN 6923 M8	4 u	8 u	16 u

LIST OF MATERIALS AT EACH TRAY			
Basortray BS	3 m	6 m	9 m
Union JUBS	3 u	6 u	9 u
Screw B1 M6x14	12 u	24 u	36 u

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 90 4x1,5 P90-R, PS90 B2ca s1d1	Power	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 90 4x50 P90-R, PS90 B2ca s1d1	Power	E90	P90-R
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Power	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Power	E60	P60-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Signal	E90	P90-R
PRAKAB	4x2X0,5mm²	PRAFlaGuard FTP TCSPKFH-V180 P15-R - P90	Signal	E90	P90-R

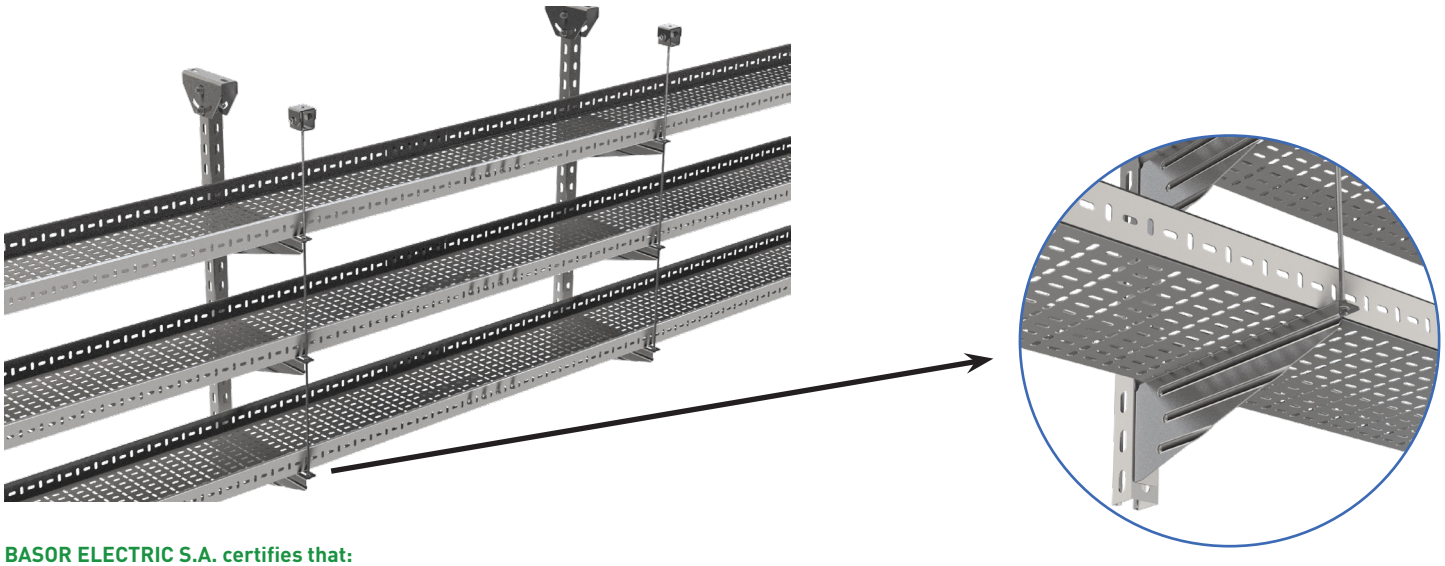
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF24.00

E90

Cable tray BS, high 60mm (2”).
Mounted at roof using threated rods and supports P41-3S and SCR



BASOR ELECTRIC S.A. certifies that:

* The system RF22.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY BS with a maximum width of 300mm (12”), with the coating Stainless Steel i316, with supports SCR, threated rods VRM6 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,0 m
Maximum load	10 kg/m
Maximum number of highs	3
High	60 mm (2”)
Width	300 mm (12”)

LIST OF MATERIALS AT EACH SUPPORT			
Support SCR	1 u	2 u	3 u
Screw B1 M6x14	2 u	4 u	6 u
Head plate KA41-3S	1 u	1 u	1 u
Screw B3 M10x20	4 u	4 u	4 u
Support P41-3S	1 u	1 u	1 u
Screw DIN 933 M10x20	2 u	4 u	6 u
Nut DIN 6923 M10	2 u	4 u	6 u
Threated Rod VRM6	1 u	1 u	1 u
Nut DIN 6923 M6	2 u	4 u	6 u

OPTIONAL MATERIALS			
Variable Set 4182CV	1 u	1 u	1 u
Nut DIN6923 M8	2 u	2 u	2 u
Washer DIN6923 M6	2 u	2 u	2 u

LIST OF MATERIALS AT EACH TRAY			
Basortray BS	3 m	6 m	9 m
Union JUBS	3 u	6 u	9 u
Screw B1 M6x14	12 u	24 u	36 u

CABLES FOR THE TEST					
Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 90 4x1,5 P90-R, PS90 B2ca s1d1	Potencia	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 90 4x50 P90-R, PS90 B2ca s1d1	Potencia	E90	P90-R
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E30	P45-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E90	P90-R
PRAKAB	4x2X0,5mm²	PRAFlaGuard FTP TCSPKFH-V180 P15-R - P90	Señal	E90	P90-R

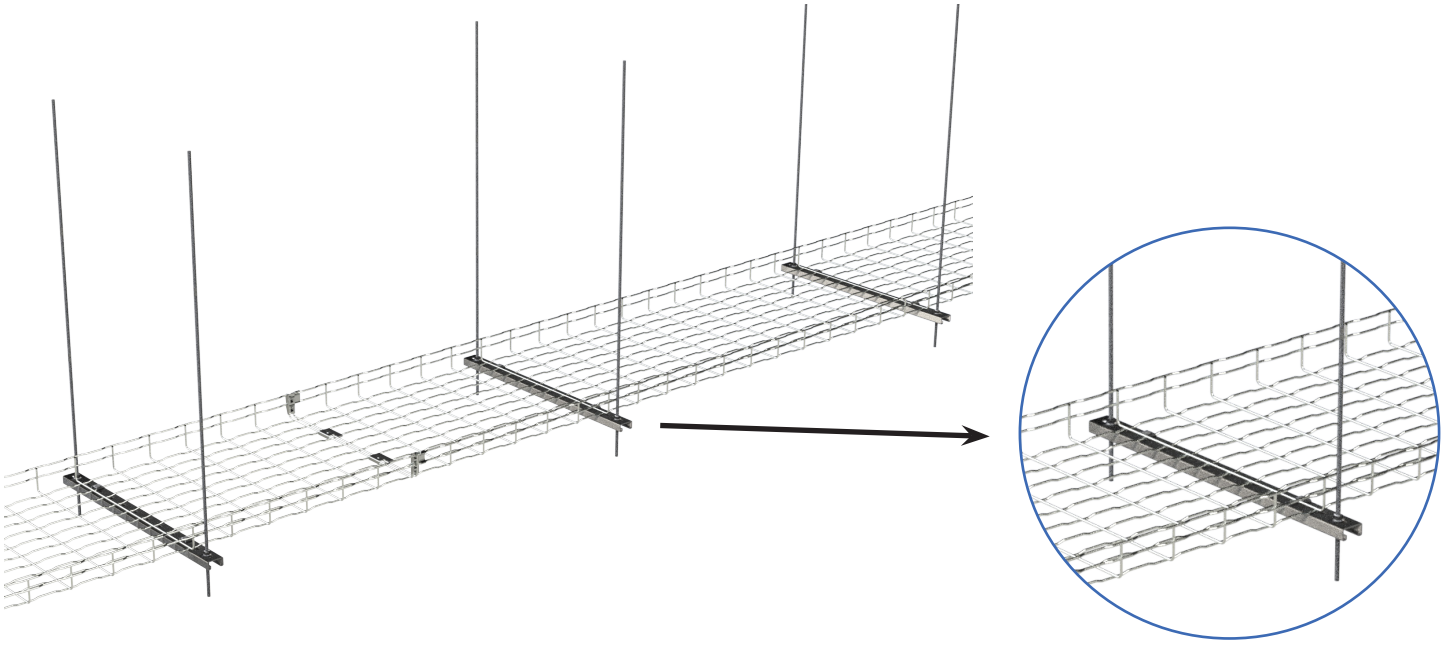
BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures

SYSTEM: RF25.00

E90

Basket tray BF2R, high 65mm (2”). Mounted at roof using threated rods and 41x21 profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF25.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 300mm (12”), with the coating EZ/EZ1000, with profiles 41x21, threated rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,2 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,2 m
Maximum load	10 kg/m
Maximum number of highs	1
High	65mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Profile P41 41x21x2,5	0,6 m
Staple GBF	2 u
Screw B1 M6x20	2 u
Nut DIN6923 M6	4 u
Threated Rod VRM8	2 u

LIST OF MATERIALS AT EACH TRAY	
Basorfil BF2R	3 m

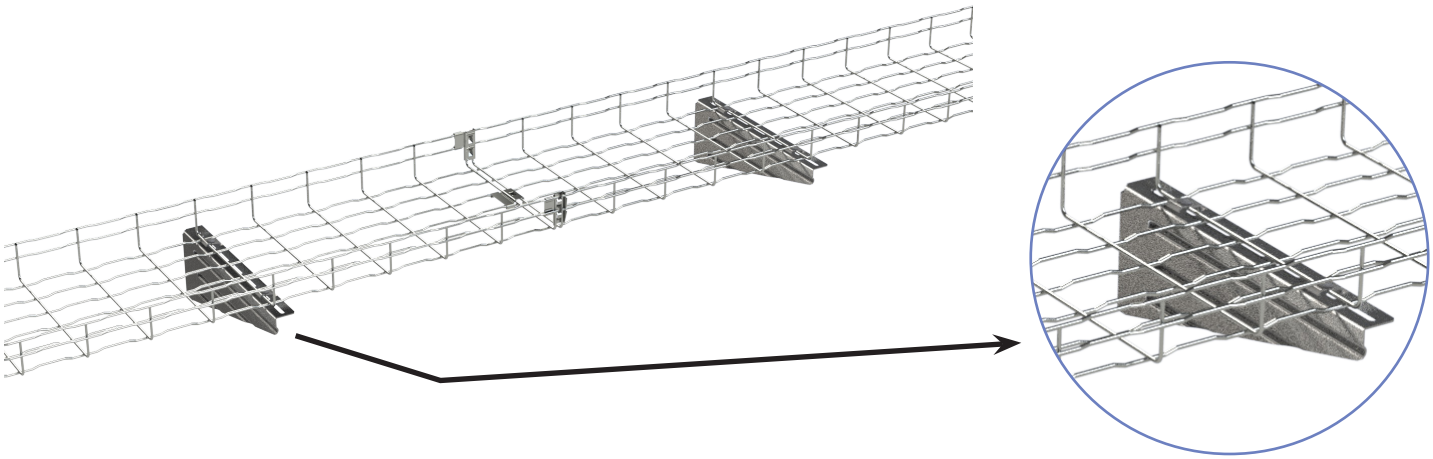
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 90 4x1,5 P90-R, PS90 B2ca s1d1	Potencia	E30	P45-R
PRAKAB	4x50 mm²	PRAFlaDur 90 4x50 P90-R, PS90 B2ca s1d1	Potencia	E30	P45-R
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E30	P45-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E60	P90-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF28.00

E90

Basket tray BF2R, high 65mm (2”).
Mounted at wall using SCR supports without threated rods reinforcement



BASOR ELECTRIC S.A. certifies that:

* The system RF28.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 300mm (12”), with the coating EZ/EZ1000, with supports SCR and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,0 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,0 m
Maximum load	10 kg/m
Maximum number of highs	1
High	65 mm (2”)
Width	300 mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1 M6x20	2 u
Staple GBF	2 u
Nut DIN9021 M6	2 u
Support SCR	1 u

LIST OF MATERIALS AT EACH TRAY	
Basorfil BF2R	3 m

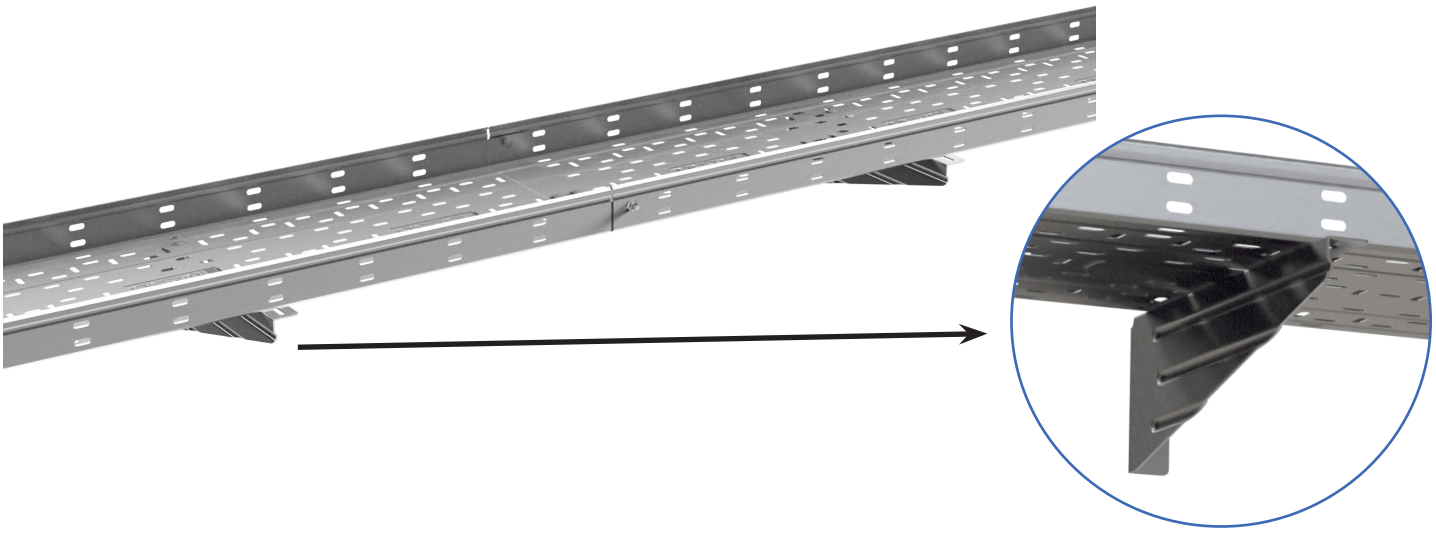
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	-	P15-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E90	P90-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF29.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at wall using SCR supports



BASOR ELECTRIC S.A. certifies that:

* The system RF29.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with supports SCR, has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,0 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,0 m
Maximum load	10 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1 M6x14	2 u
Support SCR	1 u

LIST OF MATERIALS AT EACH TRAY	
Basortray BS	3 m
Screw B1 M6x14	4 u

CABLES FOR THE TEST

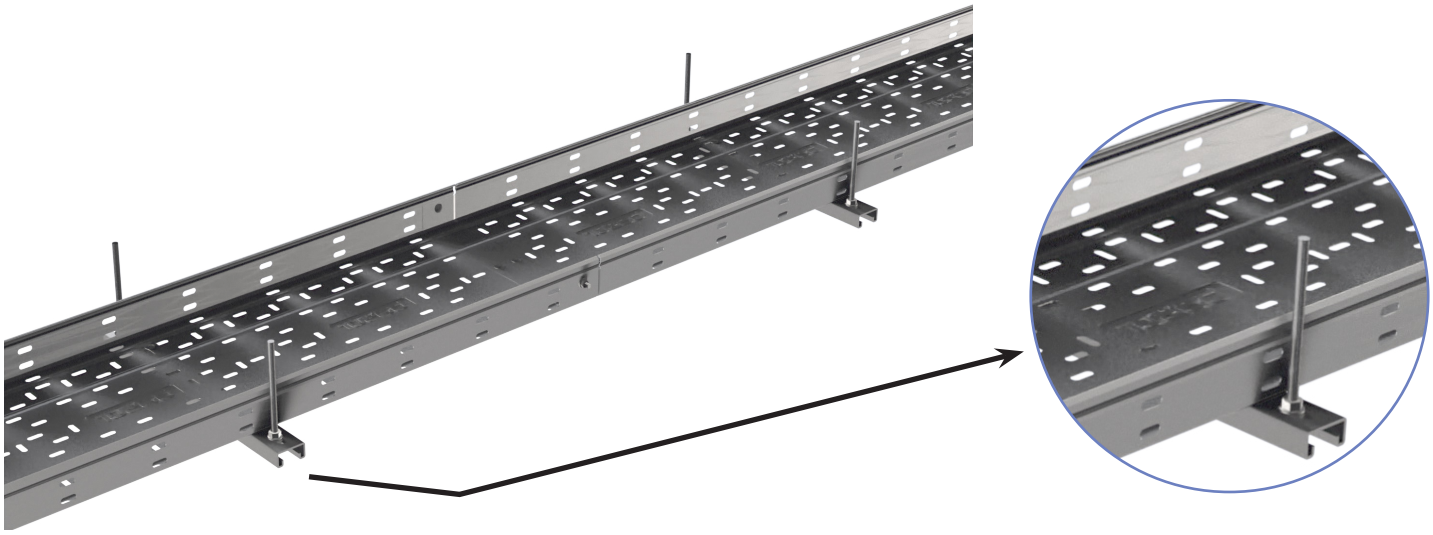
Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x1,5mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E30	P30-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E90	P90-R

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF30.00

E90

Cable tray ERE, high 60mm (2”).
Mounted at wall using Threated Rods and profiles 41x21



BASOR ELECTRIC S.A. certifies that:

* The system RF30.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses cable tray BASORTRAY ERE with a maximum width of 300mm (12”), with the coating PG/HDG, with profiles 41x21 and Threated Rods VRM8 and has been tested for a Safe working load of 10 kg/m and a maximum distance between supports of 1,0 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12 * STN 92 0205
* CSN 73 0895

PARÁMETROS TÉCNICOS PERMITIDOS EN EL MONTAJE	
Distance between supports	1,0 m
Maximum load	10 kg/m
Maximum number of highs	1
High	60mm (2”)
Width	300mm (12”)

LIST OF MATERIALS AT EACH SUPPORT	
Screw B1 M6x14	2 u
Profile P41 41x21x2,5	0,4 m
Threated Rod VRM8	2 u
Nut DIN6923 M8	4 u
Screw B1 M6x14	1 u

LIST OF MATERIALS AT EACH TRAY	
Basortray ERE	3 m
Screw B1 M6x14	3 u

CABLES FOR THE TEST

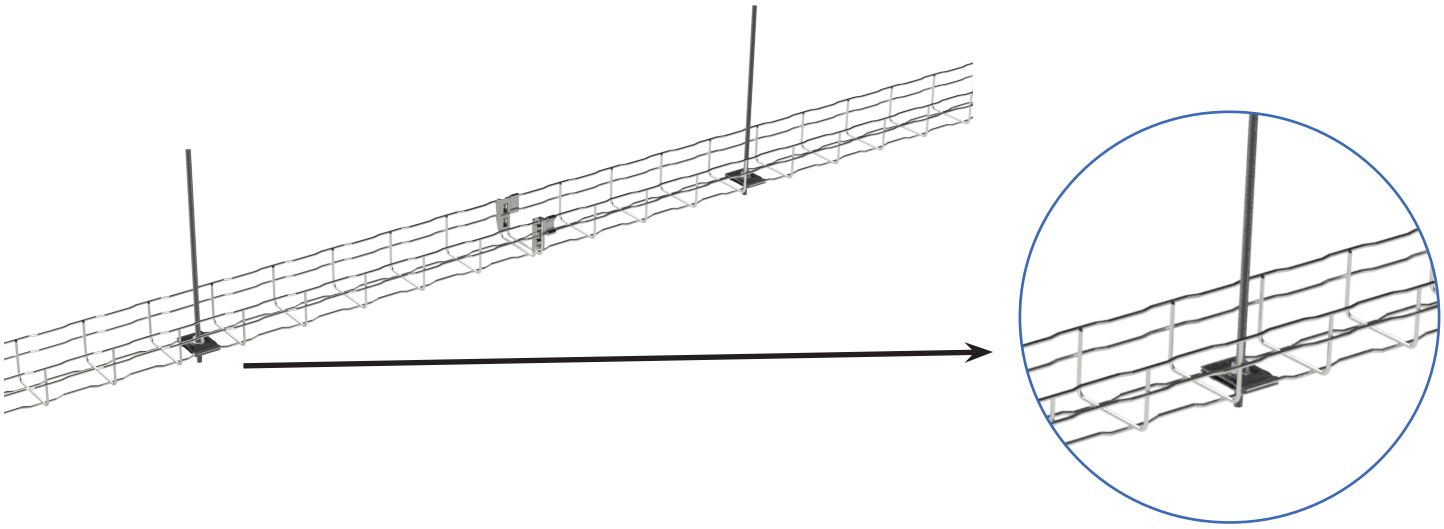
Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x50 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E30	P45-R

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF31.00

E90

Basket tray BF2R, high 65mm (2”).
Mounted at wall using threated rods and SSC profiles



BASOR ELECTRIC S.A. certifies that:

* The system RF31.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 100mm (4”), with the coating EZ/EZ1000, with supports SSC, threated rods VRM8 and has been tested for a Safe working load of 5 kg/m and a maximum distance between supports of 1,0 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12
* STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,0 m
Maximum load	5 kg/m
Maximum number of highs	1
High	65mm (2”)
Width	100mm (4”)

LIST OF MATERIALS AT EACH SUPPORT	
Support SSC	2 u
Nut DIN6923 M8	2 u
Threated Rod VRM8	1 u

LIST OF MATERIALS AT EACH TRAY	
Basorfil BF2R	3 m

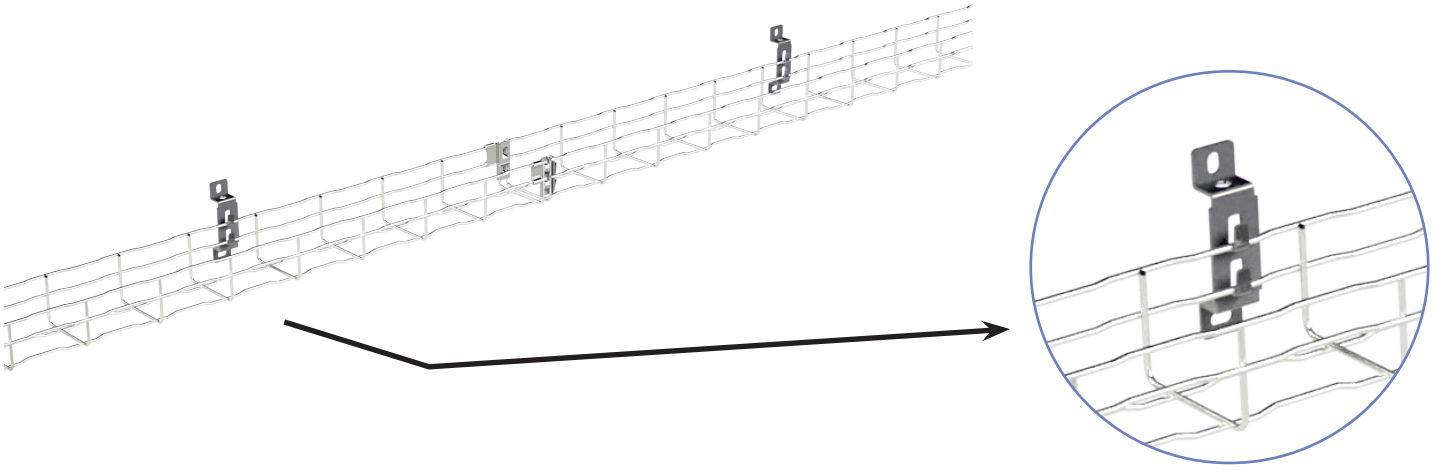
CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x16 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E60	P90-R

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF32.00

E90

Basket tray BF2R, high 65mm (2”).
Mounted at wall using simple lateral suspension SLS



BASOR ELECTRIC S.A. certifies that:

* The system RF32.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses basket tray BASORFIL BF2R with a maximum width of 100mm (4”), with the coating EZ/EZ1000, with simple lateral suspension SLS and has been tested for a Safe working load of 5 kg/m and a maximum distance between supports of 1,0 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12
* STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	1,0 m
Maximum load	5 kg/m
Maximum number of highs	1
High	65mm (2”)
Width	100mm (4”)

LIST OF MATERIALS AT EACH SUPPORT	
Support SLS	1 u

LIST OF MATERIALS AT EACH TRAY	
Basorfil BF2R	3 m

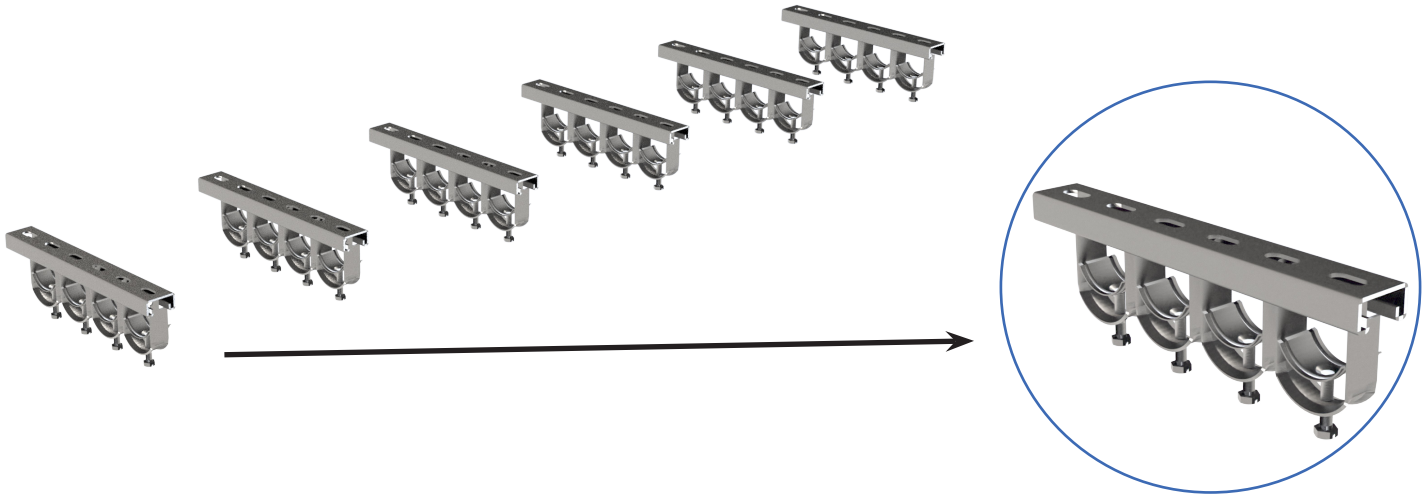
CABLES FOR THE TEST					
Manufacturer	**Section**	**Cable refference**	**Type**	**DIN 4102-12**	**STN/ ČSN**
PRAKAB	4x1,5 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	4x16 mm²	PRAFlaDur 1-CSKH- V180 P15-R - P60-R	Potencia	E60	P60-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	E90	P90-R
PRAKAB	4x2x0,5 mm²	PRAFlaGuard FTP TCSPKFH-V180 P15-R - P90	Señal	E90	P90-R

BEBasor
CABLE TRAY SPECIALIST

FIRE RESISTANT SYSTEMS: Standard low structures
SYSTEM: RF33.00

E90

Clamps SE41 to fix cables.
Mounted at roof using a support P41



BASOR ELECTRIC S.A. certifies that:

* The system RF33.00 from BASOR ELECTRIC ha as been tested as a cable management system for electrical maintenance functions according to the standards listed below, keeping the integrity until the end of the test being approved as a system E30, E60, E90.
* The assembly uses ixing metal clamps BASORFIX SE41 with a correct diameter for each cable, with profiles 41x21 of 300mm long fixed at roof and has been tested with and a maximum distance between supports of 0,3 m.

CLASSIFICATION OF FIRE RESISTANCE ACCORDING TO:

* DIN 4102-12
* STN 92 0205
* CSN 73 0895

TECHNICAL PARAMETERS ALLOWED IN THE ASSEMBLY	
Distance between supports	0,3 m
Width	300mm (12")

LIST OF MATERIALS AT EACH SUPPORT	
Support P41 41x21x2,5	0,3 m

CABLES FOR THE TEST

Manufacturer	Section	Cable refference	Type	DIN 4102-12	STN/ ČSN
PRAKAB	4x1,5 mm²	PRAFlaDur 90 P90-R, PS90 B2ca s1d1	Potencia	E90	P90-R
PRAKAB	4x50 mm²	PRAFlaDur 90 P90-R, PS90 B2ca s1d1	Potencia	E90	P90-R
PRAKAB	1x2x0,8 mm²	PRAFlaGuard F SSKFH-V180 P15-R - P90-R	Señal	-	P15-R

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NOTES

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BASOR ELECTRIC S.A Headquarters

Avenida Alcodar 45-47
46701 Gandia SPAIN

+34 962876695
basor@basor.com
www.basor.com

@basorelectric
www.linkedin.com/company/basor-electric-sa
www.youtube.com/basorelectric