



CABLE MANAGEMENT ALLIANCE EDITION 4 (2022)



# **DIETZEL**UNIVOLT



#### CONTACT US

Mail: sales@univolt.co.uk Phone: 01707379820







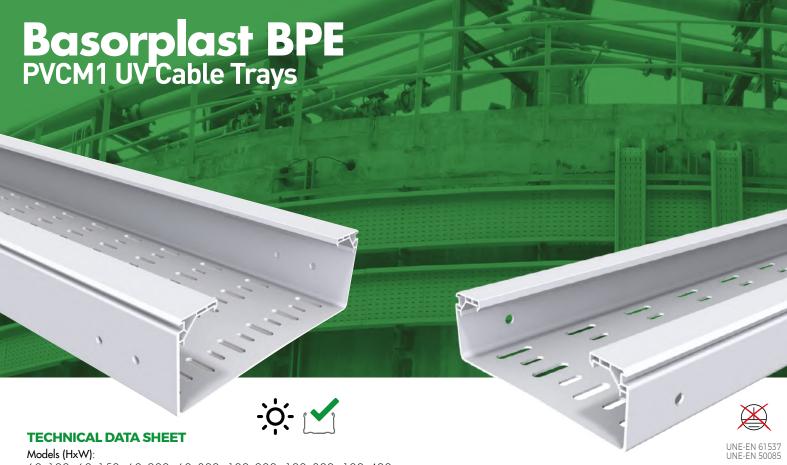






ES 2376

# PVC UV corrosion resistant trays for EXTERNAL APPLICATION



60x100; 60x150; 60x200; 60x300; 100x200; 100x300; 100x400;

100x600.

Types: Slotted or solid bottom Finishes PVC UVM1 RAL 7035

#### Characteristics of the tray:

- Non metallic system
- Resistant to UV radiation UL568
- Excellent behaviour in outdoor
- Impact strength: 20j except 60x100 with 10J
- Minimum temperature
- Maximum temperature
- Non-Flame propagating
- No electrical continuity
- Insulating
- Dielectric Strength
- High resistance to corrossion substances (DIN 8061 & ISO/TR 10358)
- M1 reaction to fire: UNE 23727
- Glow wire test: 1760°F (960°C) EN 60695-2-11
- Flammability: UL 94-VO, ANSI/UL 94-1995
- LOI > 50% EN ISO 4589
- Comply: RoHS 2011/65/UE
- Raw material without silicone



Available on basor.com

#### **INSTRUCTIONS FOR USE**

Assembly: H60 (2 union joints + 4 bolts) H100 (2 coupler joints + 8 bolts).

Installation: Not allowed under other conduction system such as water, vapour or gas.

Ventilation: Minimum distance between each tray of 250 mm.

Environments: Wet, salty and chemical.

Expansions: Depending of the expected growth in the temperature (AT) leave a gap (h) between cable trays

according to the following table:

#### **Expected Temp. Growth**

ΔT (°F)	ΔT (°C)	h (mm)
36	20	5
54	30	7
72	40	9
90	50	11

#### SAFE WORKING LOADS: RECOMMENDATION

	IEC 61537 SWL (CTA) kg/m (lb/ft)							
MODELS	Te	Temp. Max 40°C (104°F)			Temp. Max 60°C (140°F)			
MODELS	1m span (Vano) 1,5 m span (Vano)		1m span (Vano)		1,5 m span (Vano)			
	Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft	Kg/m	Lb/ft
BPE-60X100	38	26	24	16	28	19	10	7
BPE-60X150	39	26	25	17	30	20	12	8
BPE-60X200	67	45	38	26	36	24	16	11
BPE-60X300	74	50	45	30	40	27	21	14
BPE-100X200	121	81	77	52	62	42	34	23
BPE-100X300	123	83	89	56	75	50	38	26
BPE-100X400	178	120	102	68	88	79	48	32
BPE-100X600	212	142	121	81	108	73	58	39





CAP







UNE-EN 50085

ISO/TR 10358 DIN 8061











IEC 60529

Mod. 60x100 10J UNF-FN 50085

# Basorplast BPE PVC CABLE TRAYS

#### BPE-P/**H60**



Univolt Part Code	Description	Pack QTY	
BPE60X100PVC	BPE 60X100	6 m	
BPE60X150PVC	BPE 60X150	6 m	
BPE60X200PVC	BPE 60X200	6 m	
BPE60X300PVC	BPE 60X300	6 m	

### COVER TBPE



Univolt Part Code	Description	Pack QTY	
TBPE100/P/PVC	TBPE 100	6 m	
TBPE150/P/PVC	TBPE 150	6 m	
TBPE200/P/PVC	TBPE 200	6 m	
TBPE300/P/PVC	TBPE 300	6 m	
TBPE400/P/PVC	TBPE 400	6 m	
TBPE600/P/PVC	TBPE 600	6 m	

### 

#### BPE-P/**H100**



Univolt Part Code	Description	Pack QTY
BPE100X200PVC	BPE 100X200	6 m
BPE100X300PVC	BPE 100X300	6 m
BPE100X400PVC	BPE 100X400	6 m
RDF100X600DVC	RDF 100X600	6 m

#### END COVER TFBPE



	Univolt Part Code	Description	Pack QTY
	TFBPE60X100PVC	TFBPE 60X100	1 ea
	TFBPE60X150PVC	TFBPE 60X150	1 ea
	TFBPE60X200PVC	TFBPE 60X200	1 ea
	TFBPE60X300PVC	TFBPE 60X300	1 ea
	TFBPE100X200PVC	TFBPE 100X200	1 ea
	TFBPE100X300PVC	TFBPE 100X300	1 ea
	TFBPE100X400PVC	TFBPE 100X400	1 ea
	TFBPE100X600PVC	TFBPE 100X600	1 ea







#### COVER FLAT BEND TCPBPE



FLAT BEND 90° CPBPE

Univolt Part Code	Description	Pack QTY
CPBPE60X100PVC	CPBPE 60X100	1 ea
CPBPE60X150PVC	CPBPE 60X150	1 ea
CPBPE60X200PVC	CPBPE 60X200	1 ea
CPBPE60X300PVC	CPBPE 60X300	1 ea
CPBPE100X200PVC	CPBPE 100X200	1 ea
CPBPE100X300PVC	CPBPE 100X300	1 ea
CPBPE100X400PVC	CPBPE 100X400	1 ea
CPBPE100X600PVC	CPBPE 100X600	1 ea



	Univolt Part Code	Description	Pack QTY	
	TCPBPE100PVC	TCPBPE 100	1 ea	
	TCPBPE150PVC	TCPBPE 150	1 ea	
	TCPBPE200PVC	TCPBPE 200	1 ea	
	TCPBPE300PVC	TCPBPE 300	1 ea	
	TCPBPE400PVC	TCPBPE 400	1 ea	
	TCPBPE600PVC	TCPBPE 600	1 ea	



#### INSIDE BEND CCBPE



Univolt Part Code	Description	Pack QTY	
CCBPE60X100PVC	CCBPE 60X100	1 ea	
CCBPE60X150PVC	CCBPE 60X150	1 ea	
CCBPE60X200PVC	CCBPE 60X200	1 ea	
CCBPE60X300PVC	CCBPE 60X300	1 ea	
CCBPE100X200PVC	CCBPE 100X200	1 ea	
CCBPE100X300PVC	CCBPE 100X300	1 ea	
CCBPE100X400PVC	CCBPE 100X400	1 ea	
CCBPE100X600PVC	CCBPE 100X600	1 ea	

#### COVER INSIDE BEND TCCBPE



Univolt Part Code	Description	Pack QTY	
TCCBPE60X100PVC	TCCBPE 60X100	1 ea	
TCCBPE60X150PVC	TCCBPE 60X150	1 ea	
TCCBPE60X200PVC	TCCBPE 60X200	1 ea	
TCCBPE60X300PVC	TCCBPE 60X300	1 ea	
TCCBPE100X200PVC	TCCBPE 100X200	1 ea	
TCCBPE100X300PVC	TCCBPE 100X300	1 ea	
TCCBPE100X400PVC	TCCBPE 100X400	1 ea	
TCCBPE100X600PVC	TCCBPE 100X600	1 ea	



# Basorplast BPE PVC CABLE TRAYS

#### OUTSIDE BEND CXBPE



Univolt Part Code	Description	Pack QTY
CXBPE60X100PVC	CXBPE 60X100	1 ea
CXBPE60X150PVC	CXBPE 60X150	1 ea
CXBPE60X200PVC	CXBPE 60X200	1 ea
CXBPE60X300PVC	CXBPE 60X300	1 ea
CXBPE100X200PVC	CXBPE 100X200	1 ea
CXBPE100X300PVC	CXBPE 100X300	1 ea
CXBPE100X400PVC	CXBPE 100X400	1 ea
CXBPE100X600PVC	CXBPE 100X600	1 ea





SUPPORT SHG	



Univolt Part Code	Description	Pack QTY
SHG100PVC	SHG 100	1 ea
SHG150PVC	SHG 150	1 ea
SHG200PVC	SHG 200	1 ea
SHG300PVC	SHG 300	1 ea
SHG400PVC	SHG 400	1 ea
SHG600PVC	SHG 600	1 ea

#### COUPLERS & SCREWS



Description	Pack QTY
JUBPE 60	10 ea
JUBPE 100	10 ea
CTBP-100	100 ea
	JUBPE 60 JUBPE 100



#### BRIDLE IK BIK10



Univolt Part Code	Description	Pack QTY	
BIK60X100	BIK10-BPE 60X100	10 ea	
BIK60X150	BIK10-BPE 60X150	10 ea	
BIK60/100X200	BIK10-BPE 60/100X200	10 ea	
BIK60/100X300	BIK10-BPE 60/100X300	10 ea	
BIK100X400	BIK10-BPE 100X400	10 ea	
BIK100x600	BIK10-BPE 100X600	10 ea	

#### TEE/CROSS PDBPE



Univolt Part Code	Description	Pack QTY
PDBPE60PVC	PDBPE 60	1 ea
PDBPE100PVC	PDBPE 100	1 ea

#### **CABLE MANAGEMENT ALLIANCE**

#### COVER OUTSIDE BEND TCXBPE



Univolt Part Code	Description	Pack QTY
TCXBPE60X100PVC	TCXBPE 60X100	1 ea
TCXBPE60X150PVC	TCXBPE 60X150	1 ea
TCXBPE60X200PVC	TCXBPE 60X200	1 ea
TCXBPE60X300PVC	TCXBPE 60X300	1 ea
TCXBPE100X200PVC	TCXBPE 100X200	1 ea
TCXBPE100X300PVC	TCXBPE 100X300	1 ea
TCXBPE100X400PVC	TCXBPE 100X400	1 ea
TCXBPE100X600PVC	TCXBPE 100X600	1 ea



#### SUPPORT SVG



Univolt Part Code	Description	Pack QTY	
SVG100PVC	SVG 100	1 ea	
SVG150PVC	SVG 150	1 ea	
SVG200PVC	SVG 200	1 ea	
SVG300PVC	SVG 300	1 ea	
SVG400PVC	SVG 400	1 ea	
SHVG600PVC	SVG 600	1 ea	

#### **HINGED JOINTS**



Univolt Part Code	Description	Pack QTY		
JUPBEAB-60	JUBPE-AB 60	1 kit		
JUPBEAB-100	JUBPE-AB 100	1 kit		

*y* 4/8 ₹

#### PROFILES AND HEAD PROFILES



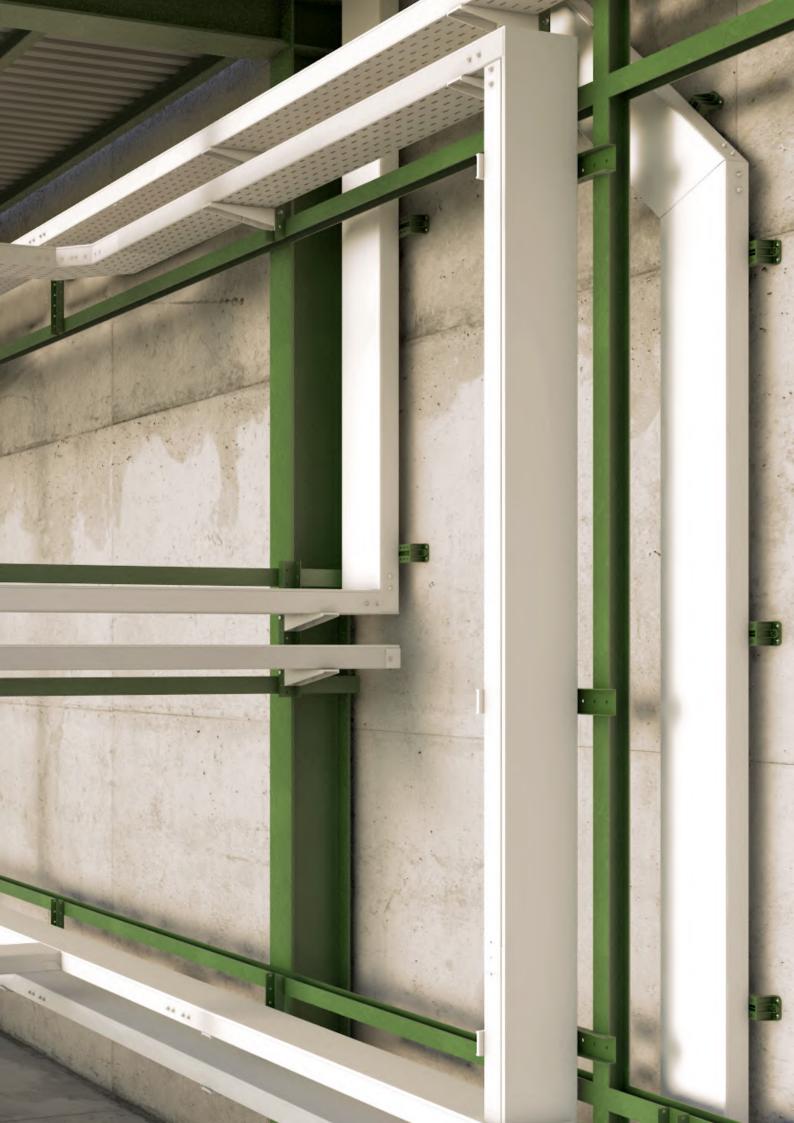
Univolt Part Code	Description	Pack QTY
PSHG2M	PSHG 2M	2 m
PSHGR600	PSHGR 600	2 ea
TFSHGRPVC	TFSHGR PVC	1 ea
KSHGR	KSHGR	1 ea
CT2M10X100	CT2 M10X100	50 ea

#### DIVIDER PROFILE PSBPE



Univolt Part Code	Description	Pack QTY
PSBPE60PVC	PSBPE 60	30 m
PSBPE100PVC	TPSBPE 100	30 m

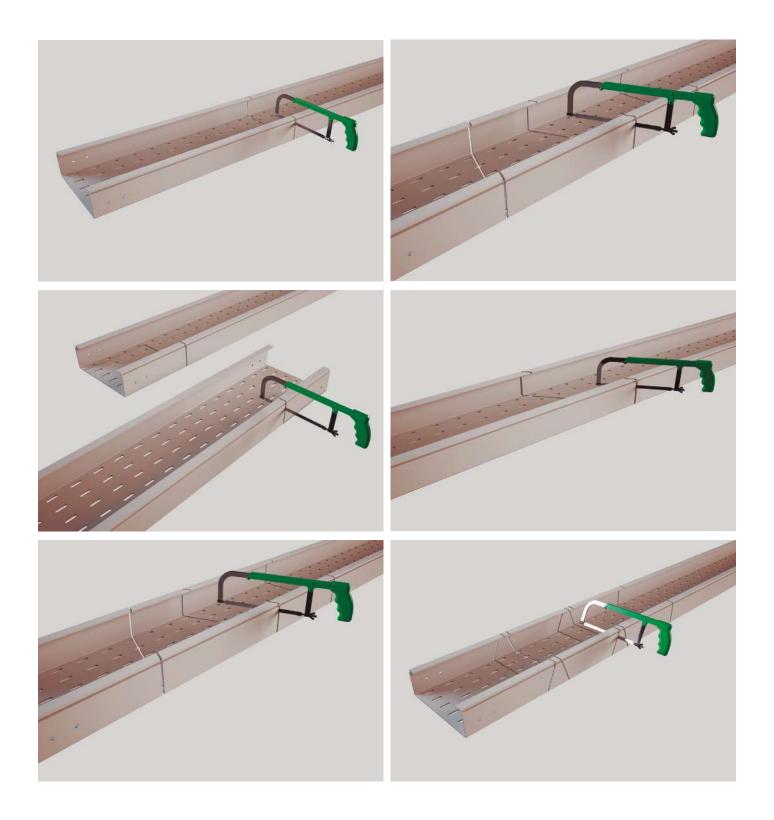




# **Cutting**

Basorplast cable tray is made from a PVC material that can be cut using a standard hand cutting saw with a fine-tooth cutting blade.

Lightly sand any rough surfaces for optium results.







# **Tools and mounting accessories**

#### **Mounting accessories**



#### **Screws and nuts:**

PVC sets of screwss and nuts for all the list of union joints (210017)



#### Standard union joint:

Straight PVC union joint available for high 60 (210084) and high 100 (210085).



#### **Vertical union joint:**

Articulated PVC union joint available for high 60 (223613) and high 100 (223614).



#### **Horizontal union joint:**

Mobible PVC union joint available for high 60 (223613) and high 100 (223614).



#### **PVC derivation Piece:**

Angle made of PVC for high 60 (223021) and high 100 (223022).

#### **Tools**



#### **Electric Drill:**

Use an electric drill machine and a borer to drill (of the n°8)



#### **Cutting saw:**

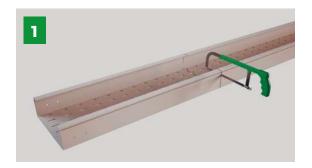
Use an standard cutting saw for PVC materials



#### **De-Burr Machine:**

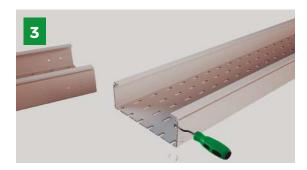
Use an small hand re-burr cutter for all materials.

# **Straight Junctions**

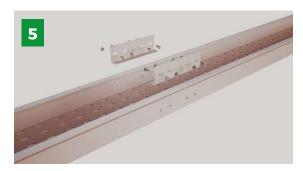












- 1. Cut the tray piece with the cutting saw into 2 pieces making a straight cut.
- 2. Separate the 2 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 2 holes (for high 60) or 4 holes (for high 100) on each piece with the electric drill.
- 5. Put 2 union joints JUBPE (210084 for the 60mm height or 210085 for the 100mm) in the correct possition and fix the union joints on the tray using 4 screws (for high 60) or 8 screws (for high 100) B2-P (210017).

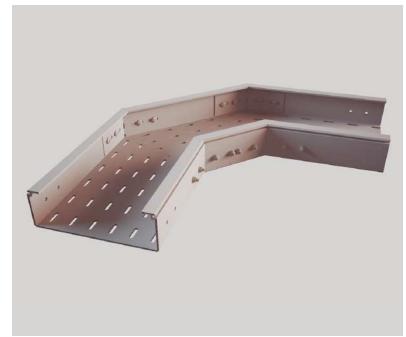
# Basorplast BPE BEND CONSTRUCTION



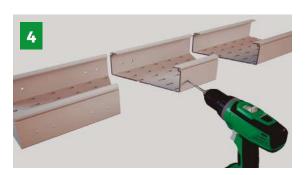
# **Horizontal Bends / Small Radius**

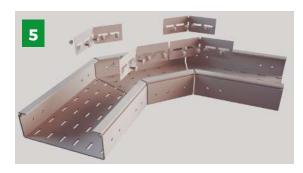






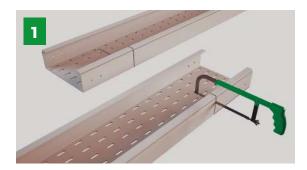




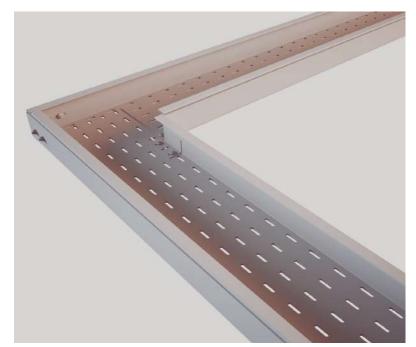


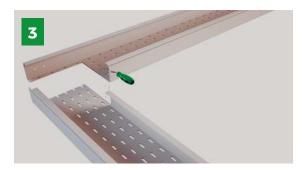
- 1. Cut the tray piece with the cutting saw in 3 pieces making a 45° cut.
- 2. Separate the 3 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 8 holes on each piece with the electric drill.
- 5. Put 4 union joints JUBPE-B (223613 for the 60mm height or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 16 screws B2-P (210017).

# **Horizontal Bends / Right Radius**











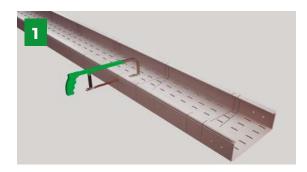


- 1. Cut the tray piece 1 removing the base and cut the tray piece 2 removing the side body, both with the cutting saw.
- 2. Separate the 2 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 1 union joint JUBPE-B (223613 for the 60mm height or 223614 for the 100mm) and 1 PDBPE (223021for the 60mm height or 223022 for the 100mm height) in the correct possition and fix the union joints on the tray using 8 screws B2-P (210017).



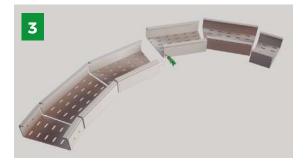


# **Horizontal Bends / Large Radius**













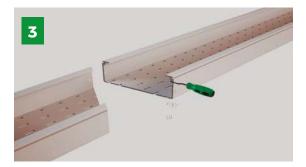
- 1. Cut the tray piece with the cutting saw in 6 pieces making a 45° cut.
- 2. Separate the 6 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 10 union joints JUBPE-B (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 40 screws B2-P (210017).

# **Horizontal Bends / Other Radius**

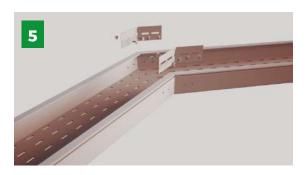










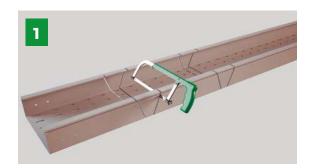


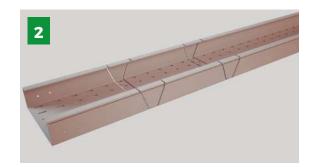
- 1. Cut the tray piece with the cutting saw in 2 pieces making a 45° cut.
- 2. Separate the 2 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 2 union joints JUBPE-B (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 8 screws B2-P (210017).



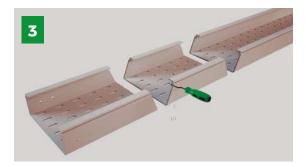


### **Inside Bends / Small radius**







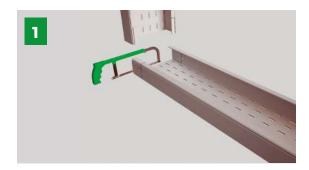


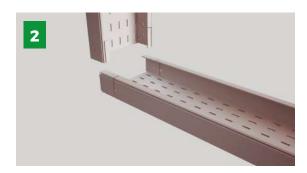


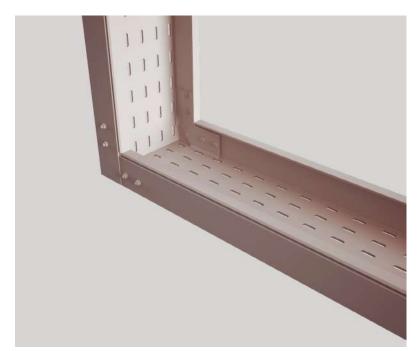


- 1. Cut the tray piece with the cutting saw in 3 pieces making a 45° angle cut.
- 2. Separate the 3 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 4 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 16 screws B2-P (210017).

# **Inside Bends / Right radius**

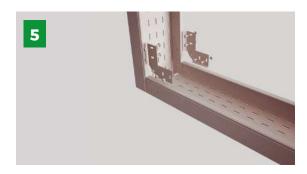












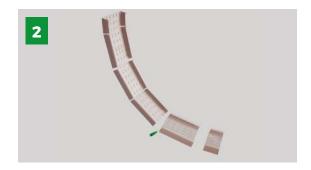
- Cut the tray piece 1 removing the top side body and cut the tray piece 2 removing the side body, both with the cutting saw.
- 2. Separate the 2 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 2 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 8 screws B2-P (210017).

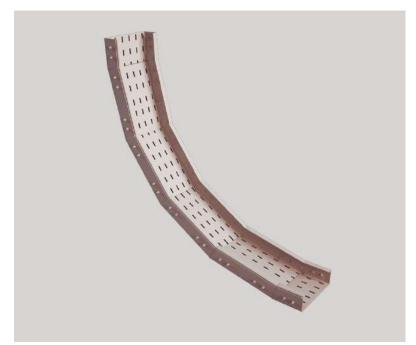




# **Inside Bends / Large radius**

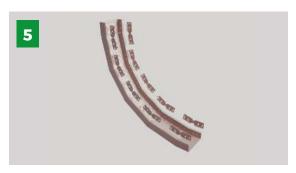






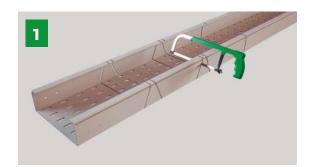


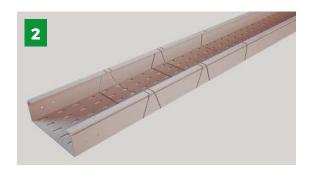




- 1. Cut the tray piece with the cutting saw in 6 pieces making a 45° angle cut.
- 2. Separate the 6 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 10 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 40 screws B2-P (210017).

# **Outside Bends / Small radius**











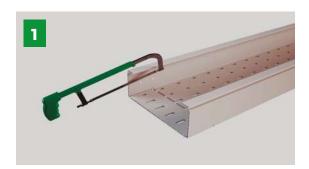


- 1. Cut the tray piece with the cutting saw in 3 pieces making a 45° angle cut.
- 2. Separate the 3 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 4 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 16 screws B2-P (210017).

# Basorplast BPE BEND CONSTRUCTION



# **Outside Bends / Right radius**





3



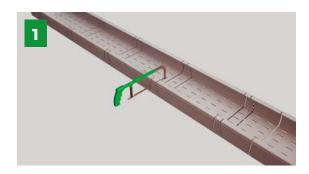






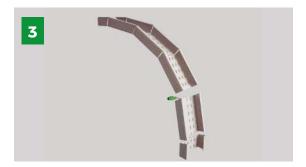
- Cut the tray piece removing the base with the cutting saw.
- 2. Separate the pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on the piece with the electric drill.
- 5. Put 2 union joints JUBPE-B (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 8 screws B2-P (210017).

# **Outside Bends / Large radius**











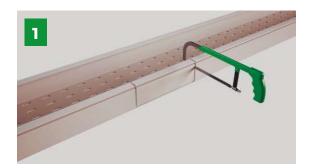


- 1. Cut the tray piece with the cutting saw in 6 pieces making a 45° angle cut.
- 2. Separate the 6 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on each piece with the electric drill.
- 5. Put 10 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 40 screws B2-P (210017).

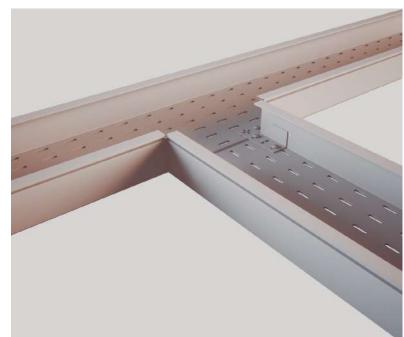
# Basorplast BPE BEND CONSTRUCTION

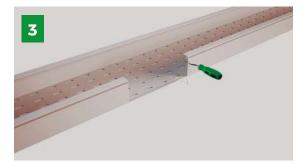


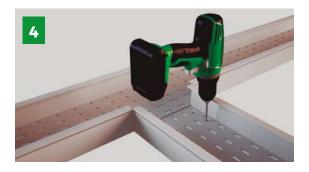
#### **Tee Bends**







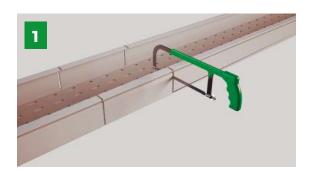


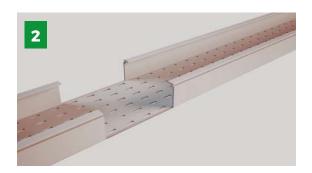


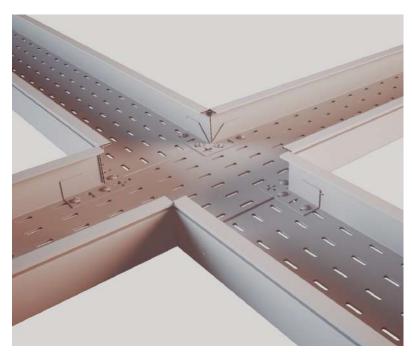


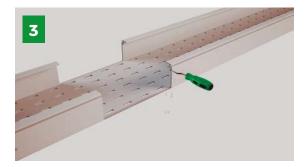
- 1. Cut the tray piece removing the side body with the cutting saw.
- 2. Separate the 2 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on the piece with the electric drill.
- 5. Put 2 derivation pieces PDBPE (223021 for high 60mm or 223022 for high 100mm) in the correct possition and fix it on the tray using 8 screws B2-P (210017).

### **Cross Bends**













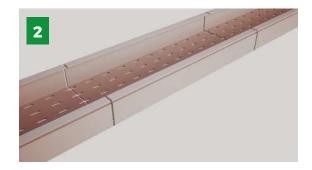
- 1. Cut the tray piece removing the 2 side body with the cutting saw.
- 2. Separate the 2 piece.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 4 holes on the piece with the electric drill.
- 5. Put 4 derivation pieces PDBPE (223021 for high 60mm or 223022 for high 100mm) in the correct possition and fix it on the tray using 16 screws B2-P (210017).

# Basorplast BPE BEND CONSTRUCTION

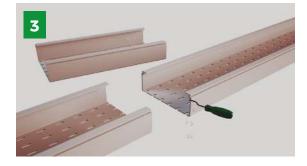


# **Elevation Changes**













- 1. Cut the tray piece with a cutting saw in 3 pieces making a straight cut.
- 2. Separate the 3 pieces.
- 3. Remove any rough edges with the de-burring machine.
- 4. Make 8 holes on each piece with the electric drill.
- 5. Put 4 union joints JUBPE-A (223613 for the 60mm or 223614 for the 100mm) in the correct possition and fix the union joints on the tray using 16 screws B2-P (210017).

# **Application on strut / Solid bottom**







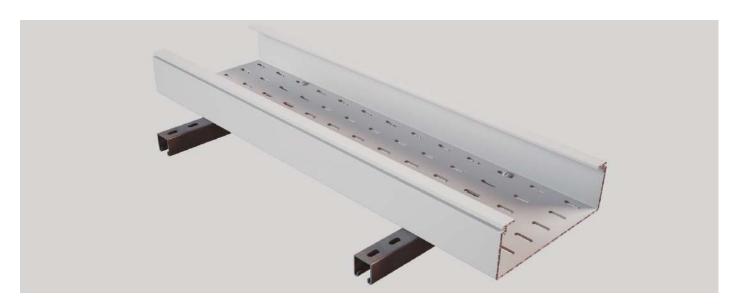


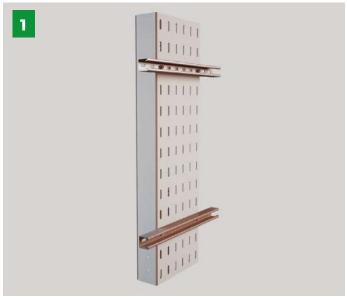
- 1. Put the strut on the base of the tray and mark the holes.
- 2. Make 4 holes on the tray with the electric drill.
- 3. Fix the strut on the tray using 4 screws B2-P (210017).



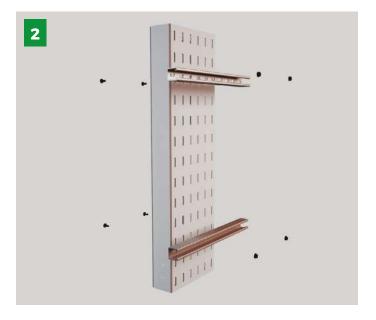


# **Application on strut / Slotted**





- 1. Put the strut on the base of the tray.
- 2. Fix the strut on the tray using 4 screws B2-P (210017).



# Basorplast BPE TECHNICAL DATA SHEETS

### SAFE WORKING LOAD

#### Installations up to 40 °C

	Safe Working Load (kg/m)	
MODEL	1 m Span 1,5 m Span	
BPE-60x100	38	24
BPE-60x150	39	25
BPE-60x200	67	38
BPE-60x300	74	45
BPE-100x200	121	87
BPE-100x300	123	89
BPE-100x400	178	108
BPE-100x600	212	121

#### Installations up to 60 °C

	Safe Working Load (kg/m)	
MODEL	1 m Span	1,5 m Span
BPE-60x100	28	12
BPE-60x150	30	12
BPE-60x200	45	20
BPE-60x300	50	21
BPE-100x200	73	49
BPE-100x300	81	50
BPE-100x400	114	68
BPE-100x600	133	96

### TESTS RESULTS ACCORDING TO UL 568

#### - Safe working load:

SWL values for 104 °F

NEMA		Safe Working Load - kg/m (lb/ft)		
classification	MODEL	2,4 m (8 ft)	1,8 m (6 ft)	1,5 m (5 ft)
-	BPE-60x100	3,1 (2,1)	5,5 (3,7)	8 (5,4)
-	BPE-60x150	4,2 (2,8)	7,6 (5,1)	10,9 (7,3)
-	BPE-60x200	19,3 (13)	34,3 (23,1)	49,5 (33,2)
5AA	BPE-60x300	21,2 (14,2)	37,8 (25,4)	54,4 (36,5)
5A	BPE-100x200	33,1 (22,3)	59 (39,6)	84,9 (57,1)
8AA	BPE-100x300	52,4 (35,2)	93,2 (62,6)	134,3 (90,2)
8A	BPE-100x400	81,3 (54,6)	144,6 (97,2)	208,3 (140)
8B	BPE-100x600	121,7 (81,8)	216,5 (145,4)	311,7 (209,5)

SWL values for 140 °F

NEMA	Safe Working Load - kg/m (lb/ft)						
classification	MODEL	2,4 m (8 ft)	1,8 m (6 ft)	1,5 m (5 ft)			
-	BPE-60x100	2 (1,3)	3,6 (2,4)	5,2 (3,5)			
-	BPE-60x150	2,7 (1,8)	4,9 (3,3)	7,1 (4,7)			
-	BPE-60x200	12,6 (8,4)	22,4 (15)	32,2 (21,6)			
-	BPE-60x300	13,8 (9,3)	24,6 (16,5)	35,4 (23,8)			
5AA	BPE-100x200	21,6 (14,5)	38,4 (25,8)	55,3 (37,1)			
5A	BPE-100x300	34,1 (22,9)	60,7 (40,8)	87,4 (58,7)			
8AA	BPE-100x400	53 (35,6)	94,2 (63,3)	135,7 (91,1)			
8A	BPE-100x600	79,3 (53,3)	141 (94,7)	203 (136,4)			



# **Application on brackets**







#### **NOTES**

# FOLLOW US ON SOCIAL NETWORKS

Do not miss all the latest news from **Basor Electric**: the most up-to-date catalogues, the best projects, assembly and product tips, national and international fairs, corporate information and everything that happens in our offices, factories and subsidiaries.



#### SCAN THE QR CODES AND DISCOVER OUR PAGES

**@Basor Electric SA** 

@BasorElectric

@BasorElectric









# **Univolt UK**

Unit 4, Quadrant Park Mundells Welwyn Garden City AL7 1FS

T-01707 379820 W- www.univolt.co.uk M- sales@univolt.co.uk