

low pressure  
duct system



### Requirements

- > fast and easy construction and installation
- > minimal amount of space
- > off-cuts reduction

### Applications

- > quadrangular ducts to be installed in civil, commercial and professional systems with pressures up to 250 Pa.



**P3ductal** smart4  
fast construction duct[al] system

**P3ductal smart4** - quadrangular air ducts solution for low pressure systems

The Kit consists of 5 pre-cut Piral HD Hydrotec panels (each one long 1200 mm; equivalent to 6 m of linear duct), 12 mm thick, with 80 µm/80 µm embossed/embossed aluminium and 5 “labyrinth” bayonets. The panels are painted externally with RAL5025 light blue and anti-scratch paint.



#### Kit characteristics

##### Panels

- 5 sheets
- 1200 mm length of each one
- 6 m total linear duct
- 12 mm thickness • 60 kg/m<sup>3</sup> foam density
- 80 µm/80 µm embossed/embossed al.

##### “Labyrinth” bayonet

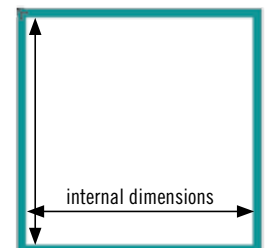
- 5 bars - 1200 mm length of each one



#### Standard pre-cut panels dimensions (mm)

100x100	150x150	200x200	250x250	300x300	350x350	400x400	450x450	500x500
100x150	150x200	200x250	250x300	300x350	350x400	400x450	450x500	
100x200	150x250	200x300	250x350	300x400	350x450	400x500		
100x250	150x300	200x350	250x400	300x450	350x500			
100x300	150x350	200x400	250x450	300x500				
100x350	150x400	200x450	250x500					
100x400	150x450	200x500						
100x450	150x500							
100x500								

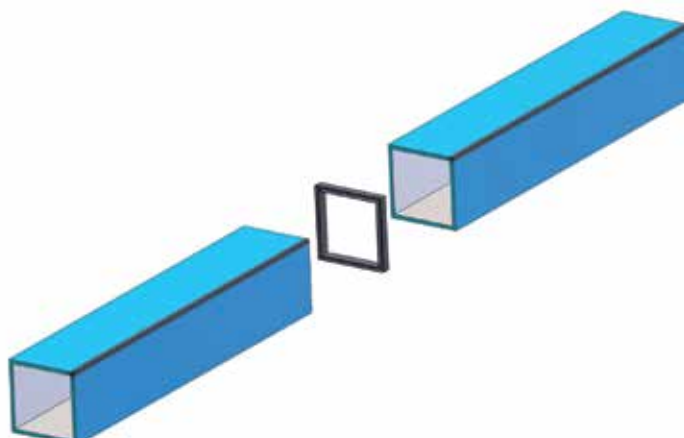
Dimensions are referred at internal dimension of the pre-cut panel section



Also available 50x200 dimension suited for VMC systems

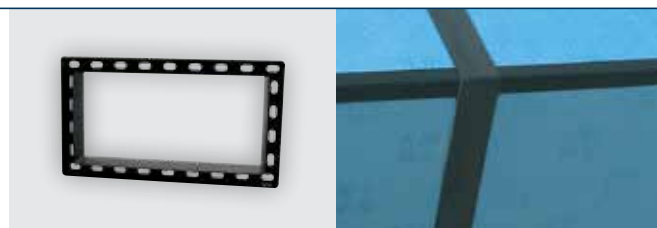


# straight duct



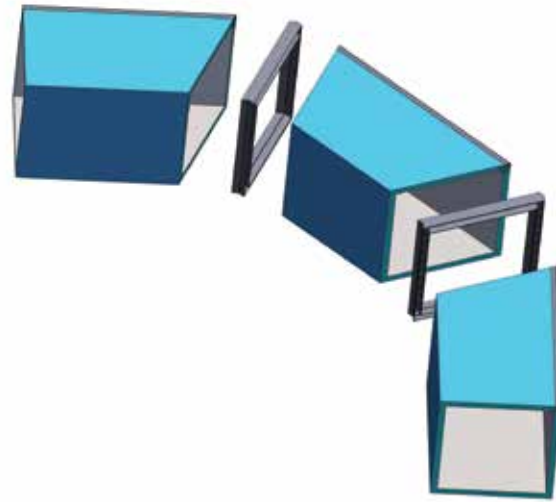
## straight frames for joining straight ducts

Straight quadrangular nylon frames, black in colour, fire reaction class V0 according to UL94, used for the fast joining of linear ducts.



Code	Description
21GD1010	Frame for joining straight ducts with section 100x100 mm
21GD1015	Frame for joining straight ducts with section 100x150 mm
21GD1020	Frame for joining straight ducts with section 100x200 mm
21GD1025	Frame for joining straight ducts with section 100x250 mm
21GD1030	Frame for joining straight ducts with section 100x300 mm
21GD1035	Frame for joining straight ducts with section 100x350 mm
21GD1040	Frame for joining straight ducts with section 100x400 mm
21GD1045	Frame for joining straight ducts with section 100x450 mm
21GD1050	Frame for joining straight ducts with section 100x500 mm
21GD1515	Frame for joining straight ducts with section 150x150 mm
21GD1520	Frame for joining straight ducts with section 150x200 mm
21GD1525	Frame for joining straight ducts with section 150x250 mm
21GD1530	Frame for joining straight ducts with section 150x300 mm
21GD1535	Frame for joining straight ducts with section 150x350 mm
21GD1540	Frame for joining straight ducts with section 150x400 mm
21GD1545	Frame for joining straight ducts with section 150x450 mm
21GD1550	Frame for joining straight ducts with section 150x500 mm
21GD2020	Frame for joining straight ducts with section 200x200 mm
21GD2025	Frame for joining straight ducts with section 200x250 mm
21GD2030	Frame for joining straight ducts with section 200x300 mm
21GD2035	Frame for joining straight ducts with section 200x350 mm
21GD2040	Frame for joining straight ducts with section 200x400 mm
21GD2045	Frame for joining straight ducts with section 200x450 mm

Code	Description
21GD2050	Frame for joining straight ducts with section 200x500 mm
21GD2525	Frame for joining straight ducts with section 250x250 mm
21GD2530	Frame for joining straight ducts with section 250x300 mm
21GD2535	Frame for joining straight ducts with section 250x350 mm
21GD2540	Frame for joining straight ducts with section 250x400 mm
21GD2545	Frame for joining straight ducts with section 250x450 mm
21GD2550	Frame for joining straight ducts with section 250x500 mm
21GD3030	Frame for joining straight ducts with section 300x300 mm
21GD3035	Frame for joining straight ducts with section 300x350 mm
21GD3040	Frame for joining straight ducts with section 300x400 mm
21GD3045	Frame for joining straight ducts with section 300x450 mm
21GD3050	Frame for joining straight ducts with section 300x500 mm
21GD3535	Frame for joining straight ducts with section 350x350 mm
21GD3540	Frame for joining straight ducts with section 350x400 mm
21GD3545	Frame for joining straight ducts with section 350x450 mm
21GD3550	Frame for joining straight ducts with section 350x500 mm
21GD4040	Frame for joining straight ducts with section 400x400 mm
21GD4045	Frame for joining straight ducts with section 400x450 mm
21GD4050	Frame for joining straight ducts with section 400x500 mm
21GD4545	Frame for joining straight ducts with section 450x450 mm
21GD4550	Frame for joining straight ducts with section 450x500 mm
21GD5050	Frame for joining straight ducts with section 500x500 mm



### angled frames for joining angled ducts

Angled quadrangular nylon frames, black in colour, fire reaction class V0 according to UL94, used for the fast joining of angled ducts.



Code	Description
21GC1010	Frame for joining angled ducts with section 100x100 mm
21GC1015	Frame for joining angled ducts with section 100x150 mm
21GC1020	Frame for joining angled ducts with section 100x200 mm
21GC1025	Frame for joining angled ducts with section 100x250 mm
21GC1030	Frame for joining angled ducts with section 100x300 mm
21GC1035	Frame for joining angled ducts with section 100x350 mm
21GC1040	Frame for joining angled ducts with section 100x400 mm
21GC1045	Frame for joining angled ducts with section 100x450 mm
21GC1050	Frame for joining angled ducts with section 100x500 mm
21GC1515	Frame for joining angled ducts with section 150x150 mm
21GC1520	Frame for joining angled ducts with section 150x200 mm
21GC1525	Frame for joining angled ducts with section 150x250 mm
21GC1530	Frame for joining angled ducts with section 150x300 mm
21GC1535	Frame for joining angled ducts with section 150x350 mm
21GC1540	Frame for joining angled ducts with section 150x400 mm
21GC1545	Frame for joining angled ducts with section 150x450 mm
21GC1550	Frame for joining angled ducts with section 150x500 mm
21GC2020	Frame for joining angled ducts with section 200x200 mm
21GC2025	Frame for joining angled ducts with section 200x250 mm
21GC2030	Frame for joining angled ducts with section 200x300 mm
21GC2035	Frame for joining angled ducts with section 200x350 mm
21GC2040	Frame for joining angled ducts with section 200x400 mm
21GC2045	Frame for joining angled ducts with section 200x450 mm

Code	Description
21GC2050	Frame for joining angled ducts with section 200x500 mm
21GC2525	Frame for joining angled ducts with section 250x250 mm
21GC2530	Frame for joining angled ducts with section 250x300 mm
21GC2535	Frame for joining angled ducts with section 250x350 mm
21GC2540	Frame for joining angled ducts with section 250x400 mm
21GC2545	Frame for joining angled ducts with section 250x450 mm
21GC2550	Frame for joining angled ducts with section 250x500 mm
21GC3030	Frame for joining angled ducts with section 300x300 mm
21GC3035	Frame for joining angled ducts with section 300x350 mm
21GC3040	Frame for joining angled ducts with section 300x400 mm
21GC3045	Frame for joining angled ducts with section 300x450 mm
21GC3050	Frame for joining angled ducts with section 300x500 mm
21GC3535	Frame for joining angled ducts with section 350x350 mm
21GC3540	Frame for joining angled ducts with section 350x400 mm
21GC3545	Frame for joining angled ducts with section 350x450 mm
21GC3550	Frame for joining angled ducts with section 350x500 mm
21GC4040	Frame for joining angled ducts with section 400x400 mm
21GC4045	Frame for joining angled ducts with section 400x450 mm
21GC4050	Frame for joining angled ducts with section 400x500 mm
21GC4545	Frame for joining angled ducts with section 450x450 mm
21GC4550	Frame for joining angled ducts with section 450x500 mm
21GC5050	Frame for joining angled ducts with section 500x500 mm

# end-caps

## end caps

End-caps in black abs



Code	Description
21FDR1010	Quadrangular end-cap for ducts of 100x100 mm
21FDR1015	Quadrangular end-cap for ducts of 100x150 mm
21FDR1020	Quadrangular end-cap for ducts of 100x200 mm
21FDR1025	Quadrangular end-cap for ducts of 100x250 mm
21FDR1030	Quadrangular end-cap for ducts of 100x300 mm
21FDR1035	Quadrangular end-cap for ducts of 100x350 mm
21FDR1040	Quadrangular end-cap for ducts of 100x400 mm
21FDR1045	Quadrangular end-cap for ducts of 100x450 mm
21FDR1050	Quadrangular end-cap for ducts of 100x500 mm
21FDR1515	Quadrangular end-cap for ducts of 150x150 mm
21FDR1520	Quadrangular end-cap for ducts of 150x200 mm
21FDR1525	Quadrangular end-cap for ducts of 150x250 mm
21FDR1530	Quadrangular end-cap for ducts of 150x300 mm
21FDR1535	Quadrangular end-cap for ducts of 150x350 mm
21FDR1540	Quadrangular end-cap for ducts of 150x400 mm
21FDR1545	Quadrangular end-cap for ducts of 150x450 mm
21FDR1550	Quadrangular end-cap for ducts of 150x500 mm
21FDR2020	Quadrangular end-cap for ducts of 200x200 mm
21FDR2025	Quadrangular end-cap for ducts of 200x250 mm
21FDR2030	Quadrangular end-cap for ducts of 200x300 mm
21FDR2035	Quadrangular end-cap for ducts of 200x350 mm
21FDR2040	Quadrangular end-cap for ducts of 200x400 mm
21FDR2045	Quadrangular end-cap for ducts of 200x450 mm

Code	Description
21FDR2050	Quadrangular end-cap for ducts of 200x500 mm
21FDR2525	Quadrangular end-cap for ducts of 250x250 mm
21FDR2530	Quadrangular end-cap for ducts of 250x300 mm
21FDR2535	Quadrangular end-cap for ducts of 250x350 mm
21FDR2540	Quadrangular end-cap for ducts of 250x400 mm
21FDR2545	Quadrangular end-cap for ducts of 250x450 mm
21FDR2550	Quadrangular end-cap for ducts of 250x500 mm
21FDR3030	Quadrangular end-cap for ducts of 300x300 mm
21FDR3035	Quadrangular end-cap for ducts of 300x350 mm
21FDR3040	Quadrangular end-cap for ducts of 300x400 mm
21FDR3045	Quadrangular end-cap for ducts of 300x450 mm
21FDR3050	Quadrangular end-cap for ducts of 300x500 mm
21FDR3535	Quadrangular end-cap for ducts of 350x350 mm
21FDR3540	Quadrangular end-cap for ducts of 350x400 mm
21FDR3545	Quadrangular end-cap for ducts of 350x450 mm
21FDR3550	Quadrangular end-cap for ducts of 350x500 mm
21FDR4040	Quadrangular end-cap for ducts of 400x400 mm
21FDR4045	Quadrangular end-cap for ducts of 400x450 mm
21FDR4050	Quadrangular end-cap for ducts of 400x500 mm
21FDR4545	Quadrangular end-cap for ducts of 450x450 mm
21FDR4550	Quadrangular end-cap for ducts of 450x500 mm
21FDR5050	Quadrangular end-cap for ducts of 500x500 mm

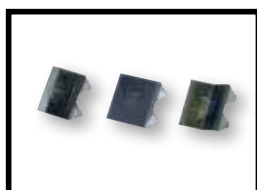
# accessories and equipment

Code	Description
15HP12 <sup>smart</sup>	Piral HD Hydrotec panel th. 12 mm
21CL14	Smart profile glue
21TG02	Straight joining clip
21TG03	Internal 45° joining clip
21TG04	External 45° joining clip
22SS07	Hooked hanger bracket for waved aluminium tape
21SS09	Frame hanger bracket for waved aluminium tape
21SS08	Waved aluminium tape for hooked hanger bracket
21PR16	Straight PVC joining profile for 12 mm panels
21PR18	Aluminium "U" section bar for 12 mm panels
21PR19	Aluminium "F" section bar for 12 mm panels
21PR21	Aluminium deflecting profile for smart4
21PR28	Plasterboard profile in aluminium 12 mm
21PR39	Chair section bar in aluminium 12 mm
21FN13	Invisible flange – for 20/12 mm joins

Code	Description
21NS06	Embossed al. tape, 50 µm thick and 50 mm wide
22SG02	Band saw
22PL01	Left jack plane
22PL02	Right jack plane
22PL03	90° straight jack plane
22PL15	Jack plane blades for 12 mm panels
22SQ08	22,5° ABS square
22MT01	Nylon marking pencil
22CT01	Cutter
22CT02	Hack saw
22CT03	Adjustable round cutter for collars
22SL01	Soft spatula
22ML01	Rubber hammer
22MR01	Folding ruler
22MR02	Tape measure



Smart profile glue



Joining clip



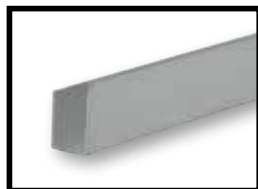
Hooked hanger bracket



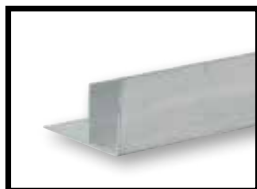
Frame hanger bracket



Waved aluminium tape



"U" section bar



"F" section bar



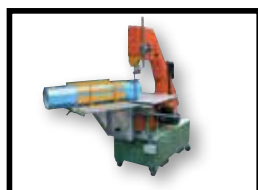
Deflecting profile



Flange for 20/12 mm joins



Aluminium tape



Band saw



Left jack plane



Right jack plane



Straight jack plane



Blades



22,5° ABS square



Nylon marking pencil



Cutter



Hack saw



round cutter for collars



Soft spatula



Rubber hammer



Folding ruler



Tape measure



Panel th. 12 mm