

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



**BDM BIO 24**

roll of paper treated to obtain the maximum idrorepellanza, to be used as a barrier to moisture rising from the subsoil. 0.2 mm thick. Height mt.1 roll Roll Size 100 m2. Roll weight kg. 80



**CORTEX NAT**

Panel pure pulp cork natural blonde, made without added adhesives, illimatata the duration in time; rot, breathable and totally non-carcinogenic, straight cut shape; suitable for prevention of mold. Collected and produced entirely in Italy. Energy Class A

DENSITY (density  $\gamma$ ) 100/110 Kg./m<sup>3</sup>

THERMAL CONDUCTIVITY ( $\lambda$ ) 0.043 WMK

REACTION TO FIRE CLASSIFICATION M2 (AFNOR Standards)

CLASS CERTIFICATION OF SMOKE F2 (Effedue)

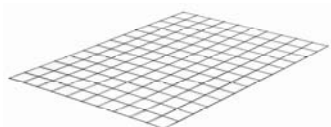
SOUND ABSORPTION 0.35 (at a frequency of 500 Hz)

Size mm plate. 1030 x 600. Available in the following thicknesses in mm.: RD 30 with 0.70, 0.93 40 with RD, 50 RD with 1.16, 1.40 60 with RD, 70 with RD 1.63, 80 with RD 1.86; 90 with RD 2.09; 100 with RD 2.33;



**CPA BIO 14/5**

perimetral frame of biological height equal to about 14 cm of vegetable fibers of Kenaf, intertwined and compacted by a mechanical needling without the addition of chemical additives. The product is coupled to an upper polyethylene film with a protective function to the underlying vegetable fibers. The Kenaf is a plant belonging to the mallow family and derived from crops that do not require the use of pesticides and herbicides. The deviations of the fiber extraction process are reused as fodder and as green fuels. Position with the transparent film exposed



**REZ**

galvanized welded mesh panels with support function to the appropriate clips series WRA (automatic) or WTS (manual). Panel size mm. 2000 x 1000; diameter wire mm. 3; mesh mm. 100 x 100 (or mm. 150 x150)

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



**WRA 17/3**

clips in plastic material (nylon reinforced with fiber glass), allow to automatically set the tube to the network REZ 10/10/3 by means of suitable tool FGT 49



**PE-Xa 17x2**

crosslinked polyethylene pipe with peroxide method, equipped with oxygen barrier evoH. Raw material is high density polyethylene (HDPE) 951 kg/m<sup>3</sup>, this pipe has a lower degree of crystallization which makes the same more flexible than that of the competitors. The pipe is crosslinked immediately after the exit from the extrusion head by heating with an infrared radiation at high power and short wavelength with a degree >75%.

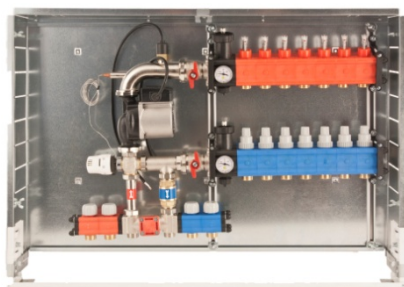
Certifications: IIP; CSTB; SKZ; IQNET; AENOR

DIN EN 12318-2 (former DIN 16892) compliant in accordance to ASTM F876 / F877.



**PE-RT 17x2**

polyethylene pipe with oxygen barrier evoH, this particular type of extrusion allows the high malleability of the pipe also in winter. Raw material is polyethylene with high thermal resistance with evoH oxygen barrier. According to DIN EN ISO 22391. IIP n° 261 / 2011 – Rev. 0 certifies that the product described complies with requirements indicated and IIP specified in the general regulations and special rules applicable and evaluated against the requirements document Sincert RT06



**DUOFIX**

control unit **only warm** at fixed point to be recessed in the wall for distribution both high and low temperatures; composed of that elements:

steel cabinet; polyamide manifold (reinforced with glass fiber) for low temperature, polyamide manifold (reinforced with glass fiber) for high temperature (2 ways for radiators) thermostat security TCS 47; three ways valve BUL 57 with thermostatic control TCB 34; double by pass valve; n. 2 thermometer TB 12; n. 2 automatic airvent; n. 2 filling valve+

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



**DUOKLIM OW**

climate control unit to be recessed in the wall for distribution both high and low temperatures; composed of that elements:

steel cabinet; polyamide manifold (reinforced with glass fiber) for low temperature, polyamide manifold (reinforced with glass fiber) for high temperature (2 ways for radiators) thermostat security TCS 47; three ways valve BUL 57 with motorized actuator AXM 117 (230 V) TCB 34; double by pass valve; n. 2 thermometer TB 12; n. 2 automatic airvent; n. 2 filling valve; ; a 3 speed Pump Grundfos UPS 25/55 Low Energy;

**Package including only warm** separately delivered

- NRT 114 control unit (to be wall installed ; don't need thermostat because that has this function)
- EGT 301 external probe (to be installed in the outside wall of the house, possibly at north)
- EGT 354 flow sensor (to be installed inside cabinet of DUOKLIM OW)



**CIM**

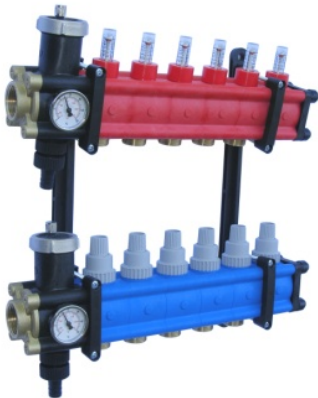
steel sheet cabinet for manifold with mobile guides . Adjustable in depth from 110 to 150 mm. Lock with screwdriver. Suitable for the containment of manifolds in the range. Available in widths of 40, 50, 60, 70, 85, 100, 120, 130



**POLIEKO**

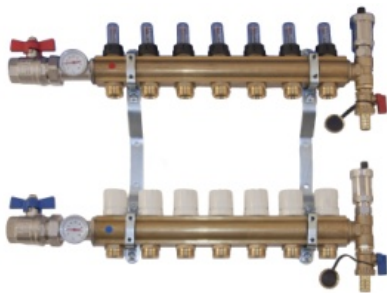
modular manifold 1" in polyamide reinforced with glass fiber, thermostatic valve on the return, with flow rate, with n. 2 thermometers, n. automatic 2 automatic airvent, n. 2 exhaust terminals, and n. 2 brackets.

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



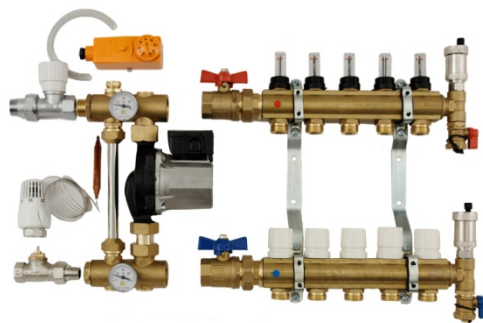
**POLISWELL**

modular manifold 1" ¼ in polyamide reinforced with glass fiber, thermostatic valve on the return, with flow rate, with n. 2 thermometers, n. automatic 2 automatic airvent, n. 2 exhaust terminals, and n. 2 brackets.



**OTTOMATIC**

brass manifold 1" thermostatic valve on the return, with flow rate, with n. 2 thermometers, n. automatic 2 automatic airvent, n. 2 exhaust terminals, and n. 2 brackets.



**OTTOFIX MONO**

UHM mixture system. This control center is designed for mixing the primary supply water with the under floor heating return water into a required temperature for under floor heating systems. Main components: thermostat security TCS 47; three ways valve BUL 57 with motorized actuator AXM 117 (230 V) TCB 34; double by pass valve; n. 2 thermometer TB 12; n. 2 automatic airvent; n. 2 filling valve; Pump Grundfos a 3 speed brand WILO  
OTTOMATIC brass manifold 1" thermostatic valve on the return, with flow rate, with n. 2 thermometers, n. automatic 2 automatic airvent, n. 2 exhaust terminals, and n. 2 brackets.  
CIM steel sheet cabinet for manifold with mobile guides . Adjustable in depth from 110 to 150 mm. Lock with screwdriver. Suitable for the containment of manifolds in the range. Available in widths of 40, 50, 60, 70, 85, 100, 120, 130

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



**APX**

fittings for connection of polyethylene pipes (PE Xa or PE RT) to the manifolds of the range swell system



**RM**

fittings for connection of multilayer pipes (MRN) to the manifolds of the range swell system



**TEP**

actuator for electrical control of the manifold, 230 V, normally closed 2 or 4 wire, (with a limit switch for an additional electrical equipment like a boiler, a pump, or other.



**TE 411**

electronic room thermostat **WC** white with: big display graphic icons matched to the front buttons for choice of mode operation. Choice Celsius or Fahrenheit. Powered by 2 AA 1.5 V alkaline. Battery life more than 4 years, an indication of insufficient charging of batteries. Max temp 45°C Dimensions 135 x 83 x 21



**CP 18**

curve support at 90° in polyamide reinforced with glass fiber. No scratch pipe

**SYSTEM N° 11  
BIOWIRED 17  
ELEMENTS DESCRIPTION**



**GDH 11**

expansion joint in flexible foam of red polyethylene, with adhesive, length mm 2000, height mm. 116, thickness mm. 7, Required for areas larger than 40 m<sup>2</sup>



**GC 19**

corrugated sheath pre-cut in black polypropylene copolymer, provided with corrugation perpendicular to the longitudinal axis; good flexibility even at low temperatures. Pre-cut in the longitudinal direction to allow the application on the pipe when it is yet installed



**LA 45**

Liquid additive for concrete slab. Designed to reduce the mixing water, improves the fluidity of the concrete, promotes good workability without delaying the development of mechanical strengths. Recommended dosage: 1% by weight of cement powder



**SWC 30**

protective liquid for underfloor radiant system. Balanced composition of corrosion inhibitors with anti-scaling action, also generates a healing effect against lime deposits or biotic, and also to corrosion residues that may be present in the plant. Also generates an algostatic effect. Compatible with all metals and plastic elastomers. Biodegradable. Dosage 1 kg every 200 litres of water in the system.