Technical Data Sheet
Pantanet® Family

1. **Scope** :

Pantanet® Family is the brand name for a spot-welded mesh made out of galvanized low carbon steel wires and subsequently PVC-coated.
The mesh is bounded by a double selvedge and the line wires are crimped in the middle of each mesh.
see fig. 1

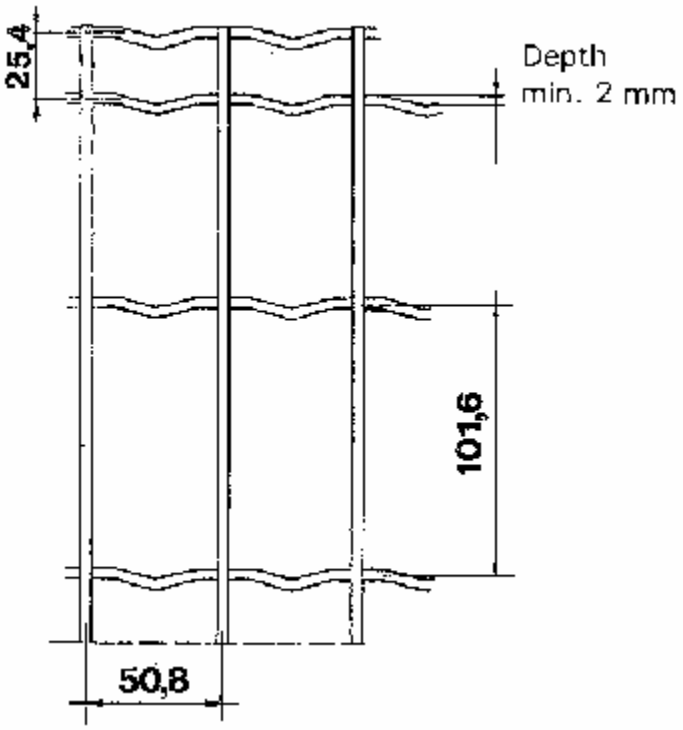

Fig 1

1.1. Normative references

- EN 10016-2:Non-alloy steel rod for drawing and/or for cod rolling
- EN 10218-2:Steel wire and wire products - General - Part 2: Wire dimensions and tolerances
- EN 10223-4:Steel wire and wire products for fences - Part 4: Steel wire welded mesh fencing
- EN 10244-2:Steel wire and wire products - Non-ferrous metallic coatings on steel wire - Part 2: Zinc or zinc-alloy coatings on steel wire

1.2. Definitions

- nominal wire diameter: the diameter in mm to designate the wire
- real wire diameter: the average value of the minimal and the maximal diameter, measured in the same section of a straight piece of wire, by means of a micrometer to 0,01mm
- mesh sizes: see fig 1
  the meshes are measured from centre to centre of the wires.
- line wires: the wires running in the longitudinal direction of the mesh
- cross wires: the wires running in the traverse direction of the mesh

2. Raw material

2.1. Wire rod: see table 1

Table 1: Chemical composition	
Element	%
C	≤ 0,10
Si	≤ 0,30
Mn	≤ 0,60
P	< 0,035
S	< 0,035

The chemical composition is in accordance with EN 10 016-2 .The designation of the wire rod is C9D

2.2. Zinc

Minimum 99,5% of pure zinc is used for galvanising

2.3. PVC

The PVC is free of cadmium,
colour: Betafence green 6073

3. Requirements

3.1. Wire diameters and tolerances see table 2

Table 2 : Wire properties				
Nominal wire diameter mm		application	Min. mass of Zinc g/m²	Tensile strength N/mm²
Core wire	PVC-coated wire			
2,00±0,09	2,50±0,15	Line wire	25	400 to 550
2,00±0,09	2,50±0,15	Cross wire	25	700 to 900

3.2. Mesh sizes and tolerances

- spacing of the line wires: see fig 1 and table 3
  tolerance: +/- 3,0 mm

Table 3 spacing of the line wires		
height (mm)	number of line wires	Spacing (from bottom up) mm
610 mm	9	1x25,4 + 1x76,2 + 4x101,6 + 1x76,2 + 1x25,4
813	11	1x25,4 + 1x76,2 + 6x101,6 + 1x76,2 + 1x25,4
1016	13	1x25,4 + 1x76,2 + 8x101,6 + 1x76,2 + 1x25,4
1219	15	1x25,4 + 1x76,2 + 10x101,6 + 1x76,2 + 1x25,4
1524	18	1x25,4 + 1x76,2 + 13x101,6 + 1x76,2 + 1x25,4
1829	21	1x25,4 + 1x76,2 + 16x101,6 + 1x76,2 + 1x25,4
2032	23	1x25,4 + 1x76,2 + 18x101,6 + 1x76,2 + 1x25,4

- spacing of cross wires: 50,8mm
  tolerance: +/- 3,0 mm

3.3. Tensile strength of the wires

- line wire 400 to 550 N/mm²
- cross wire 700 to 900 N/mm²

3.4. Weld shear strength

The average shear strength of 4 welds selected at random in 1 roll shall be not less than 75% of the breaking load of the line wire.

3.5. PVC-coating

The PVC-coating is fused and adhered to a primer that is cured onto the galvanised core wire, thus achieving an excellent bond between wire and PVC

4. Form of delivery

4.1. Roll length

10 and 25m, see also table 4

4.2. Height of the mesh

see table 3, tolerance ± 5mm

4.3. Inside diameter of the roll

About 150 mm

4.4. Outside diameter of the roll

- 25m rolls: about 36,5mm
- 10m rolls: about 26mm

4.5. Packing

Roll, packed in either shrink-or strechfoil, are forwarded on either one-way pallets of 1200 x 1000 x 145mm, 1000 x 1000 x 145mm (only for the Italian market) or on Euro-pallets of 1200 x 800 x 145mm. The pallets and bundles are stretch wrapped to firm a firm unit.

Number of rolls per pallet:

- One-way pallets:
  - 25m rolls: 9 rolls
  - 10m rolls: 23 rolls
- Euro pallets
  - 25m rolls: 9 rolls
  - 10m rolls: not available