

# Vassily Kandinsky

Tree grid  
2001

**ELEMENT:**

The unit fulfills its function of protecting the public from the hollow made by the tree and protecting the tree from the city and the road while contributing added beauty.

The materials chosen for the tree grid are of an extremely long-lasting nature and age well which highlights their expressiveness.

**WEIGHT**  
150x150  
100x100

172 kg.  
72 kg.

**TECHNICAL DESCRIPTION**

The tree protector is made up of two or four equal pieces of GGG50 ductile cast iron with a shotpeened finish, without any subsequent type of treatment.

Complies with the UNE EN-124 standard.

**GGG50 DUCTILE CAST IRON**

|                           |                       |                   |
|---------------------------|-----------------------|-------------------|
| Tensile strength          | 500                   | N/mm <sup>2</sup> |
| 0,2% stretch limit        | 320                   | N/mm <sup>2</sup> |
| Minimum elongation        | 8                     | %                 |
| Brinell hardness          | 170-220               | HB30              |
| Modulus of elasticity     | 173                   | N/mm <sup>2</sup> |
| Compressive strength      | 850-1100              | N/mm <sup>2</sup> |
| Shear strength            | 0,9 x limite elástico | N/mm <sup>2</sup> |
| Density                   | 7,1                   | g/cm <sup>3</sup> |
| 0,2% compressive limit    | 350                   | N/mm <sup>2</sup> |
| Poisson's ratio           | 0,28                  | v                 |
| Maximum load (UNE EN-124) | 10850                 | Kg                |

**FRAME**

The frame is designed to protect the tree opening. It is made of L-shaped profiles in S-275 JR galvanized steel (cross-section: 40x20x4). This element must be firmly secured to the pavement.

**S-275 JR MECHANICAL PROPERTIES**

|                    |         |                   |
|--------------------|---------|-------------------|
| Stretch limit      | 275     | N/mm <sup>2</sup> |
| Breaking strength  | 410-450 | N/mm <sup>2</sup> |
| Resilience         | 27      | J                 |
| Minimum elongation | 20      | %                 |

**S-275-JR CHEMICAL COMPOSITION**

|                |         |
|----------------|---------|
| Carbon (C)     | 0,24 %  |
| Manganese (Mn) | 1,60 %  |
| Phosphorus (P) | 0,055 % |
| Sulphur (S)    | 0,055 % |
| Nitrogen (N)   | 0,011 % |

The elements are delivered unassembled. Assembly instructions are enclosed.

