

TYPES OF WOOD MATERIAL BY IDEA



A. PINEWOOD: Impregnated with TANALITH E[®].

Tanalith is the first impregnation agent in compliance with the European Biocidal Product Regulation. Purchased from certified supplier.

B. HARDWOOD: Iroko

IDEA seletcts hardwood, according to the request of the clients and market availability.

GLUE LAMINATION: Glulam of Pinewood:

Glue-laminated pinewood timber is a structurally engineered wood product commonly used for beams and columns.

- Wood glued with industrial adhesives, is highly durable and moisture-resistant.
- Glulam is stronger than steel at comparable weights.
- Capable of generating large pieces and unique shapes. that makes glulam a cost-effective choice for long structural spans and tall columns with minimal need for additional support.

IMPREGNATION TANALITH E®: PINEWOOD:

It is an environmental and human friendly impregnating agent, contains azole compounds that have no harm to human and environmental health.

- Provides higher protection against cooper tolerant funghi, termite damage.
- Prolongs the life of the timber.
- TANALITH is odorless.
- No change in the final dimensions of the wood.

WATER-BASED PAINT:

This finish is excluded on most types of hardwood. It is a complete finish eliminating if desired the need of a separate primer or undercoat and provides low maintenance and long - term protection. It is certified by the "EN 71-3 Safety for Toys".

Painting cycle

- 1. Timber surface should be dry, well sanded with no:80-120 sandpaper and dust must be cleaned.
- 2. Manual application of the first coat by brush (can be diluted with 10% of water if needed).
- 3. Drying 16 hours.
- 4. Sand the surface with no: 180-220 sandpaper and apply the second coat.
- 4. Drying 16 hours.

WOODEN OIL:

It is the best treatment for both soft and harwood we use.

- Beautiful natural finish and non-film forming
- Increased resistance to UV.
- Water repellent.
- One coat protection.

Wood surface treated with oil naturally tend to turn grey in a variable period of time. It is a physiological reaction and is a self-protection of wood against weathering while not affecting the quality of the product. Regular renewal of the oiling process is suggested (see MAINTENANCE)

Cycle for oiling

- 1 Manually apply the first coat with a brush and remove the excess oil by cloth.
- 2. Wait 24 hours for complete dry.
- 3. Visual quality control.

MAINTENANCE:

On wood elements IDEA offers warranty againts rot. For aesthetic and functional reasons IDEA requires semiannual maintenance of wooden surfaces with the oil. On this condition we provide 2 years warranty on the looks of the products. Proceed to lightly sand to remove a deposit of dirt, and the apply a new layer of oil. In case of products that require complete repainting. Sand the Surface with no:180-220 sandpaper then remove the dust. Surface should be clean and non oily and dry. Apply 1-2 coats of water based paint. The product must be ultimately left to dry.

Aqua Wood Stain Paint and Wooden Oil for maintenance are available upon request.



STEEL AND ALUMINIUM BY IDEA



SPECIFICATIONS OF STEEL PRODUCTION

- Sanding with sandpaper no: 40-180
- Laser cutting with CNC machine: Cutting metal plates and pipes of different thickness with high precision
- Bending of the metal: reduces the need for welding of the pieces
- Gas welding
- Sanding with no:40 sandpaper
- Hot Dip galvanizing 449 ° and sanding with no: 180-220
- Alkaline degreasing
- Rinsing with water system
- Powder Coating 180-200°
- · Cooling 5-30 mins

SPECIFICATIONS OF ALUMINIUM PRODUCTION

- Sanding with sandpaper no: 40-180
- Laser cutting with CNC machine: Cutting metal plates and pipes of different thickness with high precisio
- Bending of the metal: reduces the need for welding of the pieces
- · Gas welding
- Sanding with no:40 sandpaper
- Alkaline degreasing
- Rinsing with water system
- Powder Coating 180-200°
- Cooling 5-30 mins

HOT-DIP GALVANIZATION ON STEEL

All steel components used by IDEA are hot-dip galvanized in a liquid zinc bath at 449 $^{\circ}\mathrm{C}.$

- If the surface is damaged, hot-dipped galvanized products repair themselves through zinc contracting and forming a new coating in the damaged area.
- Zinc is a more active metal in comparison to steel. This is a unique characteristic for galvanizing, which means when a galvanized coating is damaged and steel is exposed to the atmosphere, zinc can continue to protect steel through galvanic corrosion.

POWDER COATING ON STEEL AND ALUMINIUM

The powder coating process offers several advantages over conventional liquid coating methods:

- Increased durability.
- · Capabilities for more specialized finishes.
- Resistant to diminished coating quality as a result of impact.
 moisture, chemicals, ultraviolet light, and other extrem
 weather conditions. In turn, this reduces the risk of scratches,
 chipping, abrasions, corrosion, fading, and other wear issues.
- Anv RAL color can be chosen.

MAINTENANCE:

Painted surfaces which become scratched can be restored, by using the colour touch-up sprays cans of IDEA standard RAL are available upon request.

The colour should be sprayed from a distance of 10-20 cm onto the surface which has been previously cleaned from dust and dirt. Drving is achieved in about 15 minutes.

If however, on steel products, damage is deep and breaks the zinc protective coating below the paint, it will be necessary to proceed with an application of a zinc spray between the phase of cleaning and repainting. Please contact the IDEA office for advice.





COR-TEN® Steel BY IDEA



SPECIFICATIONS OF COR-TEN® PRODUCTION

- Laser cutting with CNC machine: Cutting metal plates and pipes of different thickness with high precision
- Bending of the metal: reduces the need for welding of the pieces
- Gas welding
- · Sanding with no:40 sandpaper

FEATURES AND CYCLES OF COR-TEN'S AGING

COR-TEN steel, thanks to the process of maturation/oxidation that characterizes it, is considered a "live" material which may vary over time in shades and hues, depending the the shape of the object, the position which is installed and according to the cycles of weathering which the object undergoes.

IDEA activates the maturation of corten steel using a system of natural oxidation through weathering thus favoring non-invasive techniques for the environment. This natural system, gives corten steel a particular non-uniform aspect and different shades of colour. The shades of colour, therefore, are not a defect.

IDEA purchases COR-TEN from SSAB company which has an official patent to sell it worldwide.



1. Appearance/shades of naturally died product at the time of delivery approximately 2 months of natural cidation.



2. Appearance shades of naturally oddized product after about 4/6 months of installation.



3. Appearance shades of the product at the end of the period of oxidation after about 12/24 months of installation.

MAINTENANCE:

You can repair minor surface defects (smears, dents, stains). If the corten is natural/raw, rub down the surface with a piece of steel wool, to eliminate the defect. then moisten with water and place the product on the outside, until the part returns to the surface characteristics of the rest of the piece.



STAINLESS STEEL BY IDEA



IDEA NORMALLY USES SS 304 AND 316 (by request of the client)

SPECIFICATIONS OF STEEL PRODUCTION

- Laser cutting with CNC machine: Cutting metal plates and pipes of different thickness with high precision
- Sanding with sandpaper no:120
- Bending of the metal: reduces the need for welding of the pieces
- Gas welding
- Sanding with no:40-120 sandpaper

NOTE: IDEA always uses ELECTROPOLISHING treatment. This treatment improves the corrosion resistance of products which are installed in the areas with salty air or high pollution level.

MAINTENANCE:

IDEA recommends that you periodically clean the products made of stainless steel to eliminate salt, dust, which may alter the protective layer of the material. Washing, as well as making the product clean, reduces the risk of corrosion.

Normally it's sufficient to simply wash the stainless steel with water, detergent and a soft cloth. In the case of lime scale deposit use a cream-purpose cleaner with a soft cloth while in the case of thicker deposits, very hot water with 1/4 of vinegar is necessary. For grease and oil stains, use a mild liquid dishwashing product. For rust stains, use a mild cream using a soft damp cloth.

For an optimal cleaning of Stainless Steel, IDEA uses a specific cleaner which can be provided on request