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***boraident***  
**LEAVING MARKS**

# Laser Marking for safety glass

## Advantages



### Laser Marking with Product ID:

- process control during the production process
- reduce production cost with ID based quality management
- product traceability according to legal regulations



# Identification of the construction product = safety glass

## New Legal Regulation



**NEW REGULATION (EU) No 305/2011 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 March 2011: laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC :**

starts: 24.04.2011  
valid from: 01.07.2013



### **Single Pane Marking according to Article 11 break 4:**

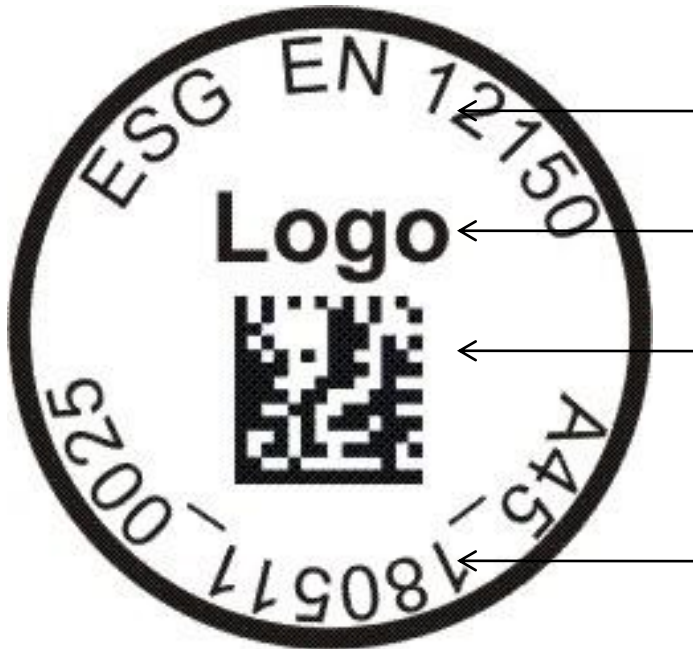
*„4. Manufacturers shall ensure that their construction products **bear a type, batch or serial number** or any other element allowing their identification, or, where the size or nature of the product does not allow it, that the required information is provided on the packaging or in a document accompanying the construction product.“*



# Single Pane Laser Marking with Product ID

Add a individual number (Product ID) to the product marking

## Laser Marking of the single pane with:



**Declaration of standard:**

**Name of producer:**

- LOGO

**NEW: Product ID with Data-Matrix-Code:**

- Order number
- Data
- Individual Number

**NEW: Product ID in plain writing:**

- A45\_180511\_00025

# Single Pane Laser Marking with Product ID



## Laser Marking – Technology: **UniColor®** for safety glass



check marking for toughening:  
marking changes the color from dark  
grey to slight white during toughening

### Advantages of the Marking:

- **Excellent visual perceptibility** of the marking before toughening
- **Check marking** – the toughening process changes the color of the marking
- **Discreet apperance after toughening** (like common screen print)
- **Process reliable machine readability** before and after toughening

### Additional Benefits:

- **save costs for screen printing** (no different screens needed)
- semi-transparent marking possible
- machine readability with handheld reader at the installed panes
- Identification of the glass type (safety, laminated, float) at the installed pane during acceptance of construction work

### Properties:

- No disturbance of the mechanical strength of the glass pane
- resistance to atmospheric corrosion
- marking of un-/coated and structurized glass panes possible
- flexible integration of the marking system in the existing production line
- marking time is adaptable to the production process

# Single Pane Laser Marking with Product ID



## UniColor® Laser Marking System – Integration at the furnace



### Integration of the Marking System:

- the marking system is mounted at a frame with wheels
- it will be arranged at the loading conveyor of the furnace
- the system needs voltage (220V) and compressed air (6 bar)

### Operation of the Marking System:

1. The operator moves the pane to the edge arrester,
2. choose the marking layout in the marking software,
3. starts the marking process with foot switch,
4. the glass pane will be marked at the upper side and
5. afterwards the operator get the glass pane to the furnace.



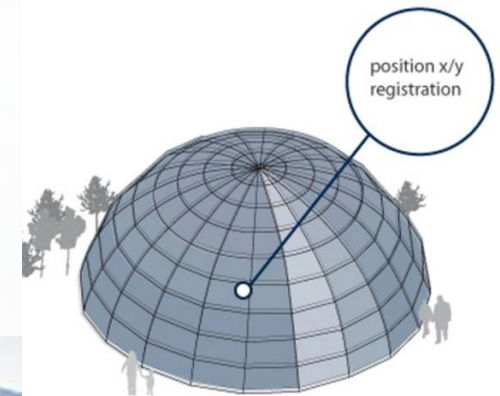


# Single Pane Laser Marking with Product ID

## UniColor® Laser Marking System: Summary

### Laser Marking with Product ID:

- process control during production process
- reduce production cost with ID based quality management
- product traceability according to legal regulations
- Assignment of the single pane to the tempering processes and quality data of the inspection system
- Assignment of the single glass pane to the install position in the building





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