

# NuRAD 8200

MODULAR CONCRETE-BASED  
SHIELDING SYSTEM



Shielding Maze

NuRAD 8200 is a special modular shielding material made of low-background and high-density concrete in unified segments, modules and related building components with unique features designed for the nuclear industry, safety and laboratory application.

## BENEFITS

- Effortless, fast, dry and clean construction
- No glue or mortar required
- Robust, solid and self-supporting construction
- Variety of surface finishing
- No hazardous materials - easy decommissioning
- No toxic materials - environmentally friendly
- Cost-saving shielding solution for gamma and neutron radiation

## KEY FIGURES

5 t/m<sup>3</sup> *Maximum available density*

2 mm *Gap between the bricks*



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## PRODUCT DESCRIPTION

NuRAD 8200 is designed to enable quick and simple erection of a variety of shielding applications such as bunkers, mazes, labyrinths, etc. As it does not require any mortar or glue, NuRAD 8200 construction is clean, dust free, and the finished elements are easy to decommission, reconfigure or reassemble.

Variable compositions of the material allow different physical characteristics:

- density up to 5 t/m<sup>3</sup>,
- boron content up to 5% to improve neutron shielding,
- low radiation background composition.

Besides the system itself, we can provide other support functions such as project documentation, technical drawings, supervision, and dosimetry control.



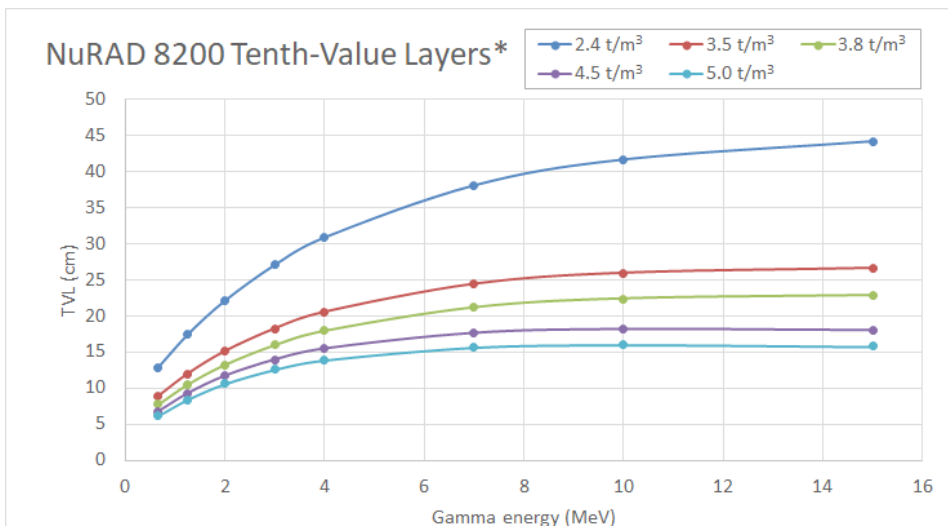
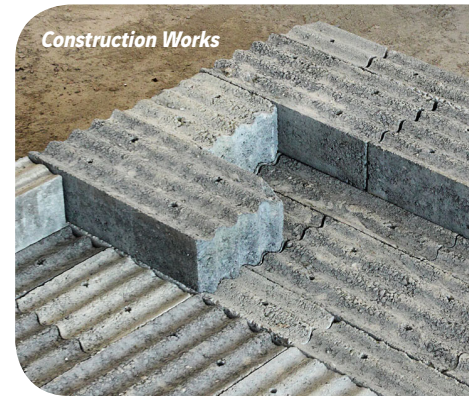
## PRODUCT SPECIFICATIONS

- Interlocking blocks, dry walling without glue or mortar
- Standard densities: 2.4 t/m<sup>3</sup>, 3.5 t/m<sup>3</sup>, 3.8 t/m<sup>3</sup>, 4.5 t/m<sup>3</sup>, 5.0 t/m<sup>3</sup>
- Seismic reinforcement using steel rods available
- Mortar of required density can be delivered to fill gaps between NuRAD and other constructions
- Certified according to EN 771-3:2011
- Delivered on euro-pallets wrapped in plastic foil, 44 pieces (0.352 m<sup>3</sup>) per pallet
- Storage in temperatures above -5 °C

## PRODUCT APPLICATIONS

- Upgrade of already built shielding bunkers, mazes, and other elements
- Radiotherapy, radiodiagnostics, nuclear medicine
- Nuclear industry, research and application

Specifications	
Standard block dimensions	400 x 200 x 100 mm
Density	2.4 – 5.0 t/m <sup>3</sup>
Optional boron content	Up to 5%
Installation time	App. 8 m <sup>3</sup> /day (3 workers)



\* Tenth-Value Layer (TVL) - the average amount of material needed to absorb 90% of all radiation, i.e. to reduce it to a tenth of the original intensity.