

## Knauf Diamant®

Technical Data Sheet

12/2023

# Knauf Diamant®

Impact resistant gypsum board

### Product Description

Special gypsum board with enhanced sound insulation, fire and moisture resistance, impact strength properties. Both faces covered with blue paper.

### Storage

Boards should be stored on pallets in a dry environment. If the boards are stored inside, max. 6 pallets on each other; outside max. 5 pallets on each other. Gypsum boards should be stored so as to prevent damage to the front faces of each boards during packaging. If the boards are stored outside, they must be covered with nylon and etc.

### Standard

TS EN 520 + A1 - Type DFH2IR

### Fields of Application

All fields of interior works with enhanced requirements for sound insulation and fire protection, and in case of special requirements on mechanical resistance and in rooms with moderate humidity. Rooms with moderate humidity (e.g. domestic bathrooms).

- Partition walls
- Suspended ceilings
- Shaft walls
- Drywall linings

### Properties

- Impact resistance
- Fire resistance
- Moisture resistance
- High sound insulation
- Increased permissible wall heights
- High dowel load capacity
- Robust surfaces
- Easy application
- Non-combustible
- High surface quality
- Time saving
- Dry and easy installation

### Technical Data

Description	Unit	12,5 mm	15 mm	Standard
Board type	-	Type DFH2IR	Type DFH2IR	TS EN 520+A1
Reaction to fire	class	A2-s1,d0	A2-s1,d0	TS EN 520+A1
Weight	kg/m <sup>2</sup>	12,5 - 13,5	15 - 16	-
Long edges	-	Tapered edge 		-
Front edges	-	Cut edge 		-
Width dimensional tolerance	mm	+0 / -4	+0 / -4	TS EN 520+A1
Length dimensional tolerance	mm	+0 / -5	+0 / -5	TS EN 520+A1
Thickness dimensional tolerance	mm	+0,5 / -0,5	+0,5 / -0,5	TS EN 520+A1
Angularity dimensional tolerance (for 1 m board width)	mm	≤ 2.5	≤ 2.5	TS EN 520+A1
Bending radius (dry bending)	mm	r ≥ 2750	-	TS EN 520+A1
Bending radius (wet bending)	mm	r ≥ 1000	-	TS EN 520+A1
Thermal conductivity λ	W/(m·K)	0,25	0,25	EN 12524
Water vapour resistance factor (dry)	μ	10	10	EN 12524
Water vapour resistance factor (wet)	μ	4	4	EN 12524
Core cohesion	min	≥ 15	≥ 15	TS EN 520+A1
Density	kg/m <sup>3</sup>	≥ 1000	≥ 1000	-
Total water absorption (Type H2)	%	≤ 10	≤ 10	TS EN 520+A1
Water absorption (Type H2)	g/m <sup>2</sup>	≤ 220	≤ 220	TS EN 520+A1
Flexural breaking load longitudinal direction	N	≥ 725	≥ 870	TS EN 520+A1
Flexural breaking load transverse direction	N	≥ 300	≥ 360	TS EN 520+A1
Surface hardness	mm	≤ 15	≤ 15	TS EN 520+A1

### Product Range

Description	Width (mm)	Length (mm)	Weight (kg/m <sup>2</sup> )	Packaging Unit (pcs./pallet)	Material Number
Knauf Diamant® 12,5 mm	1200	2500	12,5 - 13,5	40	288416
Knauf Diamant® 15 mm	1200	2500	15 - 16	30	288417

### System Performance Values

Performance values as sound insulation, fire resistance etc. may differ acc. to the drywall system to be applied. Please check the performance values of the drywall systems;

[Knauf Technical Website](#)  
[Document Center](#)

### Application

Application should be done acc. to the applicable standards (TS 1475) and acc. to the Knauf Technical Brochures of the respective drywall system.

▶ 444 YAPI - 9274

▶ [www.knauf.com.tr](http://www.knauf.com.tr) / [www.teknik.knauf.com.tr](http://www.teknik.knauf.com.tr)

▶ [teknik@knauf.com](mailto:teknik@knauf.com)

Center: Knauf Moment Beştepe Office, Beştepe Mah. 32.Cadde No:1/212-218 06560 Beştepe-Yenimahalle / ANKARA Tel: 0312 297 0100 Faks: 0312 266 4506