

# PANDA Magnets:

## Some Numbers

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Floor Tolerances

Positioning Accuracy

# Floor Tolerances



- FAIR Site and Buildings categorize the PANDA hall as “stringent requirements”: **DIN 18202 Table 3 Line 4** holds
  - Concrete will put in one piece, flooring will be controlled
  - Electronically controlled grid of e.g. 4 m can be requested
  - Tolerances at best 9 mm over 4 m or 15 mm over 15 m

Table 3: Flatness tolerances

Column	1	2	3	4	5	6
Group	Applicable to	Position deviations (limit values), in mm, for distances between measuring points, in m, to				
		0.1	1 *	4 *	10 *	15 * †
1	unfinished upper surfaces of floors, subfloors and concrete bases	10	15	20	25	30
2	unfinished upper surfaces of floors, subfloors and concrete bases subject to more stringent requirements (e.g. to receive floating screed, industrial floors, tile flooring and bonded screed), and finished surfaces for minor purposes (e.g. in storerooms or basements)	5	8	12	15	20
3	finished floors (e.g. screed as wearing courses or screed to receive a flooring, trowelled or bonded floorings)	2	4	10	12	15
4	As group 3, but subject to more stringent requirements	1	3	9	12	15

# Magnet Positioning Accuracy

- Interaction of solenoid and beam
- HESR components will be positioned with 0.1 mm accuracy
- Request to PANDA magnets: positioning with 1 mm / 1 mrad

