

SPEED SKATING HALL ERFURT, GUNDA-NIEMANN-STIRNEMANN-HALL
ERFURT, DEUTSCHLAND, 2000-2001



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Over the existing 400m-ice-plane a supportless hall construction with a span about 85m has been developed, so the hall can be used during the whole year for ice sport, speed skating, ice hockey and other events. We developed the unique form and dimension of the building regarding to the specific inner-city location next to the Thuringian Parliament and a fresh-air-aisle of Erfurt. The choice of wood as the main construction material was conditioned by building physical reasons.

The structure exists of bow-formed frames consisting of two wooden half-frames that are connected at the crest of the building. Both of the bigger frame parts consist of two glued wood twin-frames with a diameter of 1,50 m in height and 0,18 m in width. The space between these frames is filled with distance blocks of glued wood. Behind these blocks the pipes and wires of the building technique are hidden. In the tension area bars of steel with a diameter of 6 cm build the overstraining of the frames.

The foot points are pinned on steel pans. The bracing of the hall happens between every last segment pair of frames before the 2 roundings that are built by concentric ordered half frames. The distance of the big frames from centre to centre is 8,70 m.

On the inside the roof is built of acoustic trapezoidal sheet. The mineral thermal insulation is covered with punctual anchored 1,5 mm EVA foil. The 3 m glazing running circular round the hall in the plinth area enables the transparency of the building and assures the daylight supply of the hall. The inclination of the glass panels avoids blending and overheating inside the building. The band of roof lights improves the daylight feed additionally.

Client
City Erfurt

Architect
POHL Architects

Planning and Construction Process
1999 – 2002

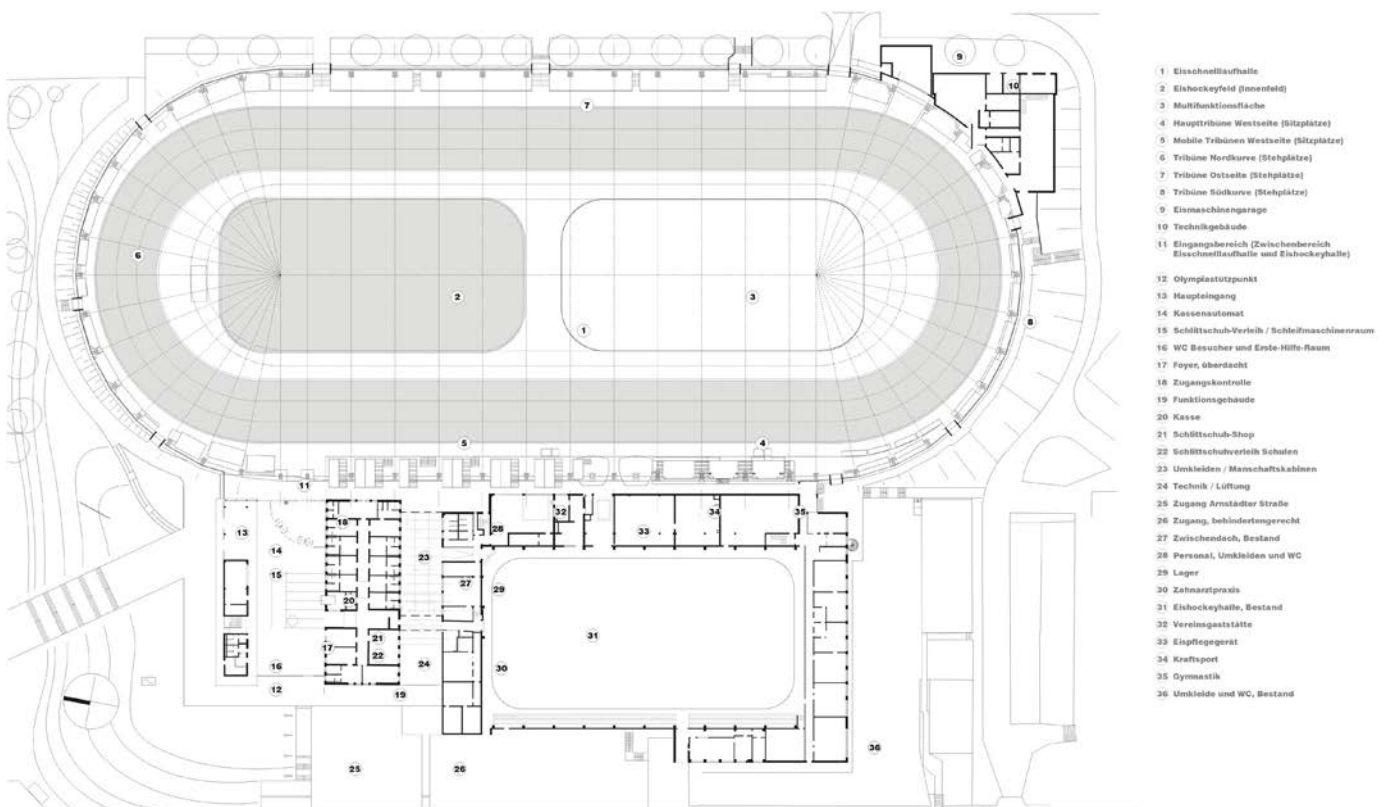
GFA
15,000 m² / 161,458 sq.ft.

Adress
Arnstädter Strasse 53
99096 Erfurt

Prizes
Competition / 1st Prize
Thuringian Award for
Wooden Buildings 2002
Civil Engineering Award 2002
Intern. IOC/IAKS AWARD 2005 silber

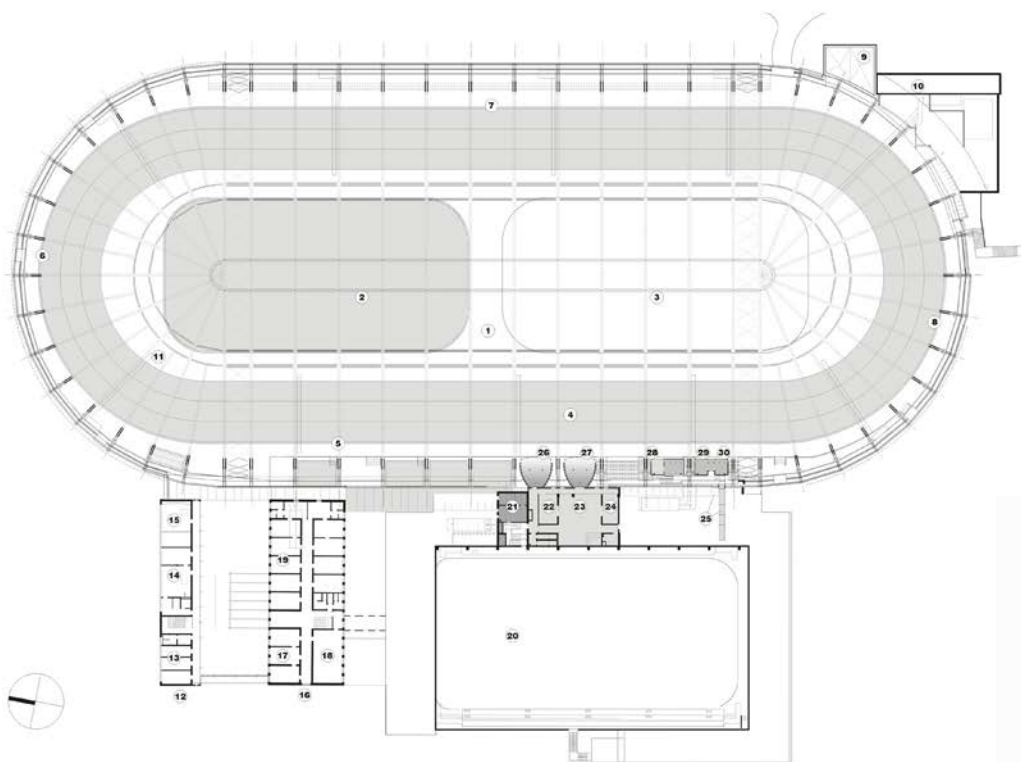
P O H L A R C H I T E K T E N

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Grundriß Erdgeschoß

SPEED SKATING HALL ERFURT, GUNDA-NIEMANN-STIRNEMANN-HALL ERFURT, DEUTSCHLAND, 2000-2001



- 1 Eisschnelllaufhalle
- 2 Eishockeyfeld (Innenfeld)
- 3 Multifunktionsfläche
- 4 Haupttribüne Westseite
- 5 Mobile Tribünen Westseite (Sitzplätze)
- 6 Nordkurve
- 7 Ostseite
- 8 Südkurve
- 9 Eismaschinengarage
- 10 Technikgebäude
- 11 Klimageräte
- 12 Olympiastützpunkt
- 13 Büro Olympiastützpunkt
- 14 Behandlung / Sporttherapie
- 15 Gymnastik
- 16 Funktionsgebäude
- 17 Büro ESC Erfurt (Eishockey-Sportclub)
- 18 Clubräume Eishockey-Verein
- 19 Büros Trainer
- 20 Eishockeyhalle, Bestand
- 21 Eismeister
- 22 Presseraum
- 23 Schulung
- 24 Wettkampfswertung
- 25 Fluchttreppe
- 26 Eismeister / Regie
- 27 Kampfrichter
- 28 Aufsicht Öffentliches Laufen
- 29 Sprecher
- 30 Zeitmessung

Grundriß Obergeschoß

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