

Technical specification of Congress-Centrum Nord of Koelnmesse

The following specification represents the technical specification for the Congress-Centrum Nord of Koelnmesse

General specification

The structure is designed as a solid construction (walls and ceilings):

Due to the emergency exit situation, the number of persons per floor is limited:

Number of persons on 2nd floor maximum 800 persons

Number of persons on 1st floor maximum 600 persons

Number of persons on ground floor maximum 1,200 persons (max. 350 persons in gastronomic area)

The clear room heights (+/- 5 cm) are:

Special areas: Press centre: 5.00 m / Room 1: 9.50 m / Room 2: 6.00 m

Foyers: Ground floor: 3.50 m / 1st floor: 4.50 m / 2nd floor: 3.50 m

Function areas: WCs: 2.50 m / Kitchens: 3.50 m / Social rooms kitchen: 2.50 m

Corridors ground floor + 2nd floor 3.50 m, 1st floor 3.00 m

Meeting rooms, VIP waiting room: 3.50 m

Offices, special use areas, conference rooms, press accreditation: 3.00m

Goods lifts on the south side of the building

Dimensions of the lifts:

1 x L 2.70 m x W 1.75 m x H 2.50 m Payload 33 persons or 2500 kg

1 x L 1.10 m x W 1.10 m x H 2.20 m Payload 17 persons or 1300 kg

Room data for Konrad Adenauer Room

Floor: High-quality textile covering (DLW type Premier VC dispersed air-capable or similar) on false floor approx. 50 cm, distributed load 10KN/m², point load capacity approx. 3.5 KN on 20 x 20 cm, trafficability with a forklift must be matched with the load capacity of the false floor

Cable conduits "under" the false floor, width = approx. 50 cm, 1 x surrounding the wall, fully openable, smoke-tight to floor cavity (V.02.02.01)

- Wall: 70% glass fibre wallpaper with dispersion coating / 30% acoustic panels (Topakustic type 13/3 B1 coated in RAL colour or similar)
- Ceiling: Suspended acoustic ceiling made of gypsum plasterboard in accordance with building physics specifications
Ceiling cavity can be partially crossed via beams for adaptation purposes
Suspension points in stage area (15 x 7.5 m): Grid 2.50 x 2.50 each 250 kg
In remaining area suspension points in grid 5 x 5 m each 250 kg
Fastening rails up to 50 kg per m. Rigidified at 15cm and 60cm distance to the outer walls against diagonal pull of 20% (V.02.02)
- Doors: Double-winged solid chipboard doors with real-wood veneer, matching the wall covering
Single-winged solid chipboard door with real wood veneer, matching the wall covering
Sound insulation factor of doors $R'w > 37$ dB (V.01.01)
- Miscellaneous: Sound insulation from room to foyer due to wall construction $R'w > 48$ dB, doors $R'w > 37$ dB (V.01.01)
Sound insulation between room 1 and room 2 - $\rightarrow R'w > 53$ dB (V01.02.01)

Room data for Rheinsaal Room

- Floor: Unbonded screed or cast plaster floor in accordance with building physics specifications, distributed load 5KN/m^2 , point load capacity 4 KN on 20 x 20 cm, trafficability with a forklift must be matched with the load capacity of the floor
High-quality textile covering (DLW type Premier VC or similar), skirting boards linked;
Cable conduit on external and corridor walls, can be adapted (with covers in accordance with floor covering)
False floor in area of room doors, can be lifted up fully, width min. = door width + 2 x 60 cm false floor panel, depth = 60 cm
- Wall: 70% glass fibre wallpaper with dispersion coating / 30% acoustic panels (Topakustic type 13/3 B1 coated in RAL colour or similar)
Internal walls as variable wall Dorma-HüppeVariflex-M-Solid 100K
(room division $4 \times 120\text{m}^2 + 2 \times 100\text{m}^2$); wood face veneer surface of the variable walls
- Ceiling: Suspended acoustic ceiling punched made of gypsum plasterboard with dispersion coating in accordance with building physics specifications
Suspension points in stage area (15 x 7.5 m): Grid 2.50 x 2.50 each 250 kg
In remaining area suspension points in grid 5 x 5 m each 250 kg

Fastening rails up to 50 kg per m. Rigidified at 15cm and 60cm distance to the outer walls against diagonal pull of 20% (V.02.02)

Doors: Double-winged solid chipboard doors with real-wood veneer, matching the wall covering, R'w=37dB with wooden edge and door stopper, stainless steel fitting

Other: Sound insulation from room to foyer due to wall construction R'w > 48 dB, doors as above in R'w 37 dB (V.01.01), in total 6 media terminal boxes on the wall (per room unit 1x)
Media connection box in each possible room unit on the wall incl. connection to floor conduit
Sound insulation between room 1 and room 2 - -> R'w > 53 dB (V01.02.01)
Sound insulation variable walls R'w > 42 dB, sound insulation between adjacent rooms R'w > 42 dB, sound insulation between non-adjacent rooms R'w > 48 dB (V.03.04.01)

Ventilation and air-conditioning

The ventilation and air-conditioning of all the rooms is activated and monitored via the central Koelnmesse control room. Room temperatures can be adjusted individually in a predefined range via individual temperature controllers.

Media technology

Congress-Centrum Nord has an audio distribution matrix which makes it possible to feed audio signals through 33 media connection blocks distributed in the building in order then to distribute these signals by means of hardware and software and output them at the desired place via the available loudspeaker groups.

Equipping of media tank: 2 x RGBHV (image)
4 x XLR sym. (sound)
4 x Cat 7 (DMX and control)
1 x antenna socket double

Video signals can be fed into the media tanks by means of hardware via RGB/HV BNC connectors and via the media room on the second floor by means of hardware.

A total of 12 Shure radio microphone lines with fixed frequencies are installed which can be distributed via the audio matrix using hardware and software in both rooms.

Conference technology

Brähler ICS Digimic conference system with 12 table and 4 room speaking points.

Audio technology

12 x Sennheiser hand-held microphones MD431 II (cable-connected)

4 x Shure MX412/C lectern microphones

1 x sound Multicore 16/4

1 x audio mixing desk Midas Venice 24/4

Transmission technology CC Nord

12 x radio receivers Shure SLX 4

6 x hand-held transmitters Shure SLX 2 with SM 58 microphone

6 x pocket transmitter Shure SLX 1 with WL 93 clip-on microphone or
Beta 53 headset microphone

Frequencies of the wireless microphones in CC Nord

The following applies in principle:

Frequencies in the range from 790.00 to 814.00 MHz

may **NOT** be used **externally** in the area of CC Nord.

The frequencies in the region between 838.00 and 862.00 MHz are
permitted.

Frequencies

800.000 – 820.000

MHz

Channel	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Group 11	Group 12	Group 13	Group 14
1	801.25 0	801.22 5	800.95 0	800.52 5	801.475	800.60 0	800.650	806.000	806.025	801.400	800.90 0	801.200	803.850	806.150
2	804.82 5	804.80 0	802.95 0	801.92 5	803.025	802.05 0	803.125	807.100	807.425	808.300	802.10 0	803.800	807.000	811.650
3	806.97 5	806.95 0	804.32 5	803.65 0	805.800	804.27 5	804.450	808.500	808.525	816.400	806.20 0	805.900	809.700	814.400
4	808.80 0	808.77 5	806.42 5	804.85 0	806.950	805.75 0	806.150	809.600	810.400		809.30 0	807.000	811.050	816.500
5	810.32 5	810.30 0	808.05 0	807.40 0	809.125	806.85 0	807.250	811.475	811.500		814.10 0	809.200	813.900	817.450
6	811.55 0	811.52 5	809.27 5	808.52 5	810.575	808.55 0	808.725	812.575	812.900		816.10 0	811.700	816.500	819.300
7	813.17 5	813.15 0	810.80 0	810.27 5	811.725	809.87 5	810.950	813.975	814.000		817.20 0		817.600	
8	815.27 5	815.25 0	812.62 5	811.55 0	813.800	812.35 0	812.400				819.60 0		819.500	
9	816.65 0	816.62 5	814.77 5	813.77 5		813.45 0	813.500							
10	818.65 0	818.62 5	818.35 0											
11	819.75 0	819.80 0	819.77 5											

red: is used for the microphones in CC Nord and may not be used externally

green: alternative frequencies for additional radio microphones in CC Nord

blue: can only be used externally after discussion with KoelnKongress

black: frequencies which are not authorised in Germany

Stage lighting CC-Nord

Konrad Adenaur Room

8x Stepped lenses

2 kW with supports, TV adapter, barn door, colour filter frame,
rod-operable incl. light, shockproof socket,
suspension on three-point traverse, safety rope

Brand:Desisti
Leonardo 321320

6x Stepped lenses

1 kW with supports, TV adapter, barn door, colour filter frame,
rod-operable incl. light, shockproof socket,
suspension on three-point traverse, safety rope

Brand:Desisti
Leonardo 311320

5x Source Four Zoom Profiler

750 W with insert iris aperture 15-30°, supports, TV adapter, colour
filter frame, incl. light, suspensions on
existing traverses, safety rope

Brand:ETC
S4 Zoom

4x 12 channel dimmer (in dimmer room)

24 kW fitted in 19" cabinet, incl. 4m rubber cable
and 125A CEE connector and Harting connector HAN 16E

Brand:Avolites ART 2000-S 12 x 16A

4x Movinglight

575 HSR WashLight

Brand:Martin Mac 600 (Osram HSR 575/72)

2x Movinglight

575 HSR Spot

Brand:Martin Mac 500 (Osram HSR 575/72)

1x 24 channel light desk

Brand:MA Lightcommander 24/6

Rheinsaal

12x Stepped lenses

2 kW with supports, TV adapter, barn door, colour filter frame,
rod-operable incl. light, shockproof socket,
suspension on three-point traverse, safety cable
Brand: Desisti
Leonardo 311320

5x Source Four Zoom Profiler

750 W with insert iris aperture 25-50°, supports, TV adapter, colour
filter frame, suspensions on existing traverse, incl. light, suspension,
safety cable

Brand: ETC
S4

4x 12 channel dimmer (in dimmer room)

24 kW fitted in 19" cabinet, incl. 4m rubber cable
and 125A CEE connector and Harting connector HAN 16E

Brand: Avolites ART 2000-S 12 x 16A

2x 12 channel light desks

Brand: MA Lightcommander 12/2

1x DMX Merger for the sections in the Rheinsaal

5 inputs to 1 output,

Brand: Swisson

Dimmer room

Dimmer room with 19" dimmer cabinets for both rooms.
Cabled from the dimmer room for in each case 60 channels per room to
Harting connectors.

Power connection:

8x 125A CEE 3 P+N+PE

10x load multicores per room:

Connection dimmer room: Harting connector HAN **16E**
Connection boxes in the ceilings of the rooms: Harting socket HAN **16A**

Connections Konrad Adenauer Room

5x floor box: 2x Schuko 16A 1P+N+PE
1x Schuko 16A 1P+N+PE Audionetz

2x RJ45 DV/TK
1x 32A CEE 3 P+N+PE
1x 36A CEE 3 P+N+PE

The supply room for the KA room is located behind the stage.
The cable duct for both rooms to the OB van car park on the south side of CC Nord is also located in this room.

Connections floor:

3x offset boxes:

4x Harting connectors HAN 16A
2x 32A CEE 3 P+N+PE
4x Schuko 16A
4x Cat 7
1x antenna socket double

Power connections stage room:

1x Harting connector HAN 16A
5x 32A CEE 3 P+N+PE
2x 63A CEE 3 P+N+PE
1 x 125A CEE 3 P+N+PE
2x 10A Schuko 1P+N+PE

Connections Rheinsaal

The power connections indicated above for the Konrad Adenauer Room stage room can also be used for the Rheinsaal via the cable duct.

Connections floor:

3x offset boxes:

4x Harting connectors HAN 16A
2x 32A CEE 3 P+N+PE
4x Schuko 16A
4x Cat 7
1x antenna socket double

6x floor box: 2x Schuko 16A 1P+N+PE
1x Schuko 16A 1P+N+PE Audionetz
2x RJ45 DV/TK
1x 32A CEE 3 P+N+PE