INSTRUCTION MANUAL

Impact Ball Nor**279**

Norsonic

Nor279 – User Guide
lm279_1Ed1R0En – October 2016 edition

If you wish to communicate with us, please feel welcome

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Impact Ball

nor279

Scope

The Impact Ball Nor279 is a product developed for use as an impact source for measurements of impact sound insulation performance - for example of floors in collective housing.

It is compliant with the requirements in

- ISO 10140-3 Measurement of impact sound insulation (ISO10140-5 Annex F.2 Heavy/soft impact source)
- ISO 16283-2 Annex A.2 Field Measurement of impact sound insulation.

Method

The rubber ball generates an impact force in the octave bands from 31,5 Hz to 500 Hz. Hence, it is primary useful for checking out the low frequency performance of the floor under test.

It shall be dropped in a vertical free fall from a height of 100cm (+/- 1cm) measured from the bottom of the rubber ball to the surface of the floor. After the drop, the ball shall be captures in order to avoid multiple impacts on the floor.

Minimum four rubber ball positions shall be used for the test measurement. For lightweight floors with joints, one of the positions should be above the joints and one position should be at the center points of the floor.

Specifications

Rubber raw material: Silicon rubber

Shape: Hollow sphere, diameter 178 ±1 mm, wall thickness 32 mm

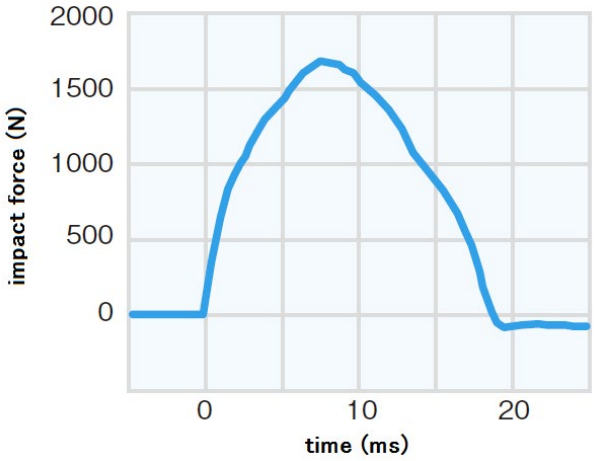
Equivalent mass: 2.5 ±0.1 kg

Restitution coefficient: 0.8 ±0.1

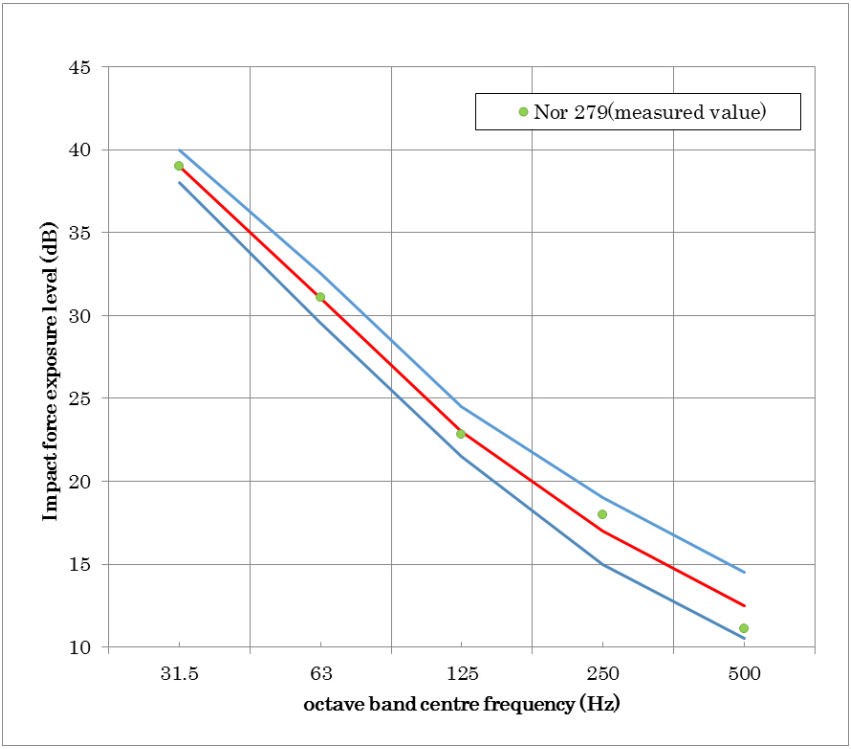
Rubber hardness: 40° ±5°

Impact force characteristics:

Impact force waveform (Example)

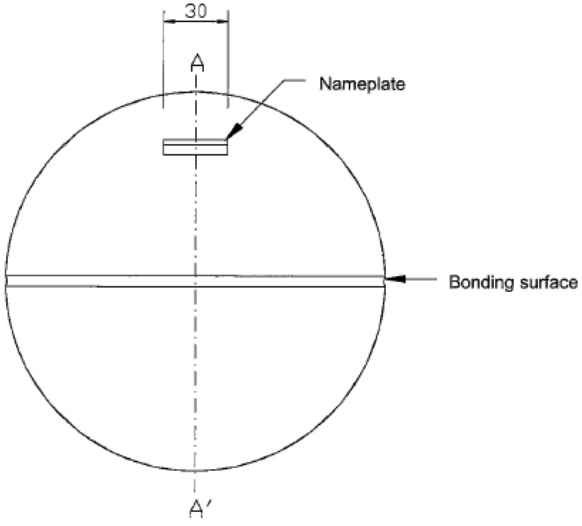


Impact force exposure level

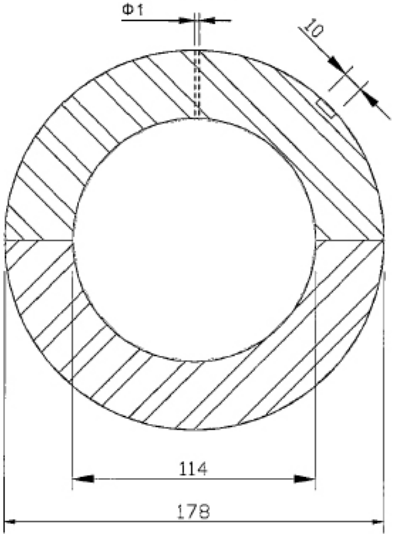


Octave band center frequency (Hz)	31,5	63	125	250	500
Impact force exposure level (dB)	39,0±1,0	31,0±1.5	23,0±1,5	17,0±2,0	12,5±2,0
Impact force exposure level, measured values (dB) (representative)	39,0	31,1	22,8	18,0	11,1

Dimensions:



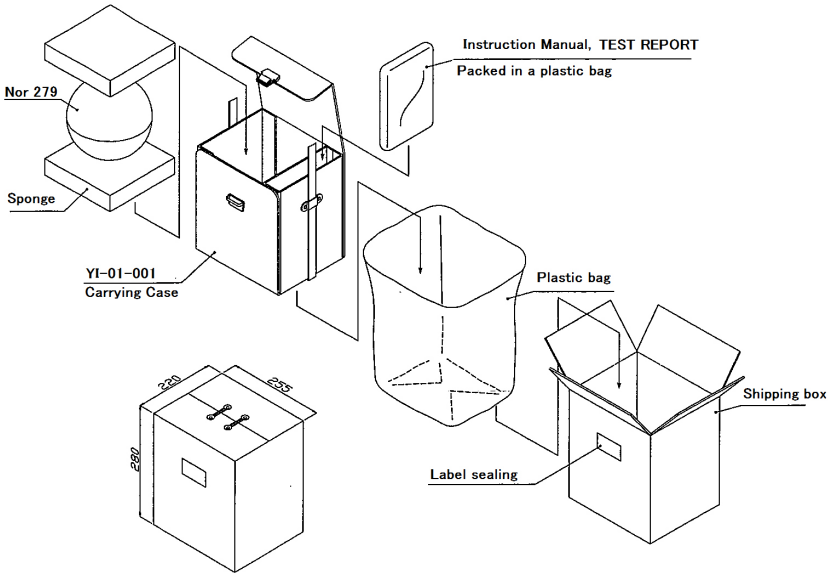
Design drawing



A-A' Cross-section view

Parts included

Supplied items	Quantity
Impact Ball Nor 279	1
Test report	1
Instruction manual	1
Sponge	2
Carrying case YI-01-001	1
Shipping box	1



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