

# Herculan MF



## Multi Functional



**Herculan MF** sports floors are seamless, cushioned, **Multi-Functional** floors with point-elastic properties.

**Herculan MF** sports floors are EN 14904 tested and approved for use as multi purpose sports surfaces for all indoor sports, by ISA Sport, the Netherlands Olympic Committee and the Netherlands Sports Federation.

**Herculan MF** sports floors are certified by the International Handball Federation (IHF) and the Badminton World Federation (BWF)

The high performance of the seamless surface of the **Herculan MF** system is non-porous, therefore hygienic and easy to clean. **Herculan MF** systems provide the optimum slide and slip resistance. Due to high tensile strength and elasticity of the Herculan EX 800 thickness layer and the excellent wear resistance of its Herculan PU 145 or Herculan PU 100 W top-layer, this tough and durable sports floor can also be used, without extra protection, for exhibitions, concerts, speech-days and all kinds of other non-sports functions.

All Herculan Sports Floors are easy to maintain and can be resurfaced quickly and economically when required.



Certified



# Herculan MF 4 + 2 .. 12 + 3

Type of sports surface	Multi-purpose point-elastic indoor sports surface.
Aim	Suitable for all indoor sports and multi functional use, see Herculan System Selection Chart.
Description of the sports surface	2 or 3 mm of coated polyurethane layer on bonded rubber granulate Sub-Base layer.

## Herculan MF System properties:

### Athlete surface interaction:

System	Vertical Deformation (EN 14809 DIN 18032-2)	Force Reduction (EN 14808 - DIN 18032-2)	Energy Restitution (N/F4.1)
Herculan MF 4 + 2	2 mm	13 %	41 %
Herculan MF 5 + 2	2 mm	18 %	43 %
Herculan MF 6 + 2	2 mm	23 %	46 %
Herculan MF 7 + 2	2 mm	32 %	48 %
Herculan MF 9 + 2	3 mm	35 %	52 %
Herculan MF 10 + 2	4 mm	38 %	46 %
Herculan MF 10 + 3	3 mm	36 %	48 %
Herculan MF 12 + 3	4 mm	40 %	51 %

### System Properties of the Sports Surface:

Vertical Ball Behavior (EN 12235 DIN 18032-2)	99 %
Compression set (ASTM D-395-B)	1.9 %
Compression strength (N/S1.1)	> 4 N/mm <sup>2</sup> (> 4 Mpa)
Resistance to Impact (EN 1517-1999)	> 12 Nm
Resistance against static load (24 hours)	25 kg/cm <sup>2</sup>
Resistance to indentation (EN 1516)	< 0,11 mm
Resistance to a rolling load (EN 1569:1999)	> 1500 N
Resistance to Fire (DIN 51960)	not flammable-class 1
Resistance to Fire (BS 476 Part 7 :1997)	not flammable-class 3
Resistance to Fire (EN-ISO 11925:2002 & 9239-1:2002)	C <sub>FL</sub> - s1
Resistance to stubbed and burning cigarettes (EN 1399)	Resistant no damage

### Properties of the Herculan EX 800 Base Layer:

Surface Hardness (DIN 53505, ASTM D-2240)	Shore A = 76
Tensile Strength (EN ISO 527-1, DIN 54455)	11 N/mm <sup>2</sup> (11 MPa)
Elongation at break (EN ISO 527-1, DIN 54455)	>190 %
Tear Resistance (DIN 53515)	25 N/mm

### Properties of the Herculan PU 145 / PU 100 W Surface Layer:

Surface texture (N/F 12.1 -macro, micro, porosity)	fine, polished, closed
Surface color	see Herculan color chart
Resistance to Wear (EN-ISO 5470-1, ASTM C-501)	Taber H18 1 kg 1000 cycles 3.6 ‰
Gloss (EN-ISO 2813)	3 - 6 ‰
Friction (EN 13046-4)	Dry 85 at 20 °C
Friction (EN 14837 Leroux)	Dry 0.7 at 20°C
	Wet 0.3 at 20°C
Sliding qualities (N/F 6.1)	Dry 0.4 at 20°C
	Wet 0.2 at 20°C
Light (Color) Fastness (DIN 54004)	8 (excellent)
Specular (light) Reflectance (EN 13745)	0.1 - 0.3 (color dependent)