

# weber 4655 Industry Flow Rapid



- Can be coated with e.g. epoxy
- Easy spreading
- Nearly crack-free floors without elevations on the edge
- Low alkaline pH 10.5-11 – Protects against alkaline degradation of floor adhesives (min. 5 mm thickness) -> healthy indoor air
- Certified EPD environmental product description
- The product is a declared item in the Supply Chain Declaration Portal (SCDP) for New Buildings generation 4.

## ABOUT THIS PRODUCT

Pumpable, fast setting and enables fast covering, cementitious levelling screed for industrial floors. Layer thickness 5-30 mm.

## AREA OF USE

Levelling of light and medium-load industrial floors. The product does not normally require a dust-retention surface treatment agent, but for aesthetic reasons or under chemical stresses it is recommended to coat with solvent-free epoxy or polyurethane-based paint.

## SUBSTRATE

Suitable substrates are weber 110 fine, weber 120 reno, weber 130 core, weber 140 nova, weber 4601, or concrete with a tensile strength of > 1 MPa. There are separate instructions for treating the substrate, see weber MD 16 Primer product datasheet.

## PRODUCT SPECIFICATION

Material consumption	approx. 1.7 kg/m <sup>2</sup> /1 mm layer
Recommended layer thickness	5-30 mm (can be thicker, covering time must be taken into account). Optimal approx. 10 mm.
Recommended water content	4.0 l/20 kg (20% of dry weight)
Application temperature	+10...+25 °C. Optimal +15...+20 °C.
Curing time for covering	Ready for coating in 1-7 days depending on the layer thickness and drying conditions up to 30 mm; covering time is longer for thicker layers (+23 °C, 50% RH).
Curing time for pedestrian traffic	approx. 2-4 h (+23 °C, 50% RH)
Binder	Special cement mixture
Filler	Natural sand and limestone powder
Additive	Additives to improve adhesion and spreadability properties. Casein-free.
Adhesion strength 28 days	> 3.0 MPa (adhesion to concrete K30, EN 13813)
Compressive strength class	C 35 (EN 13813)
Flexural strength class	F 10 (EN 13813)
Shrinkage 28 days	< 0.4 mm/m (+23 °C, 50% RH)
Reaction to fire (for exposure situations)	A2 <sub>FL</sub> -s1 (EN 13501-1)
Fire resistance classification	EI 15 requirements are met with a layer thickness of 25 mm and EI 30 requirements with a layer thickness of 35 mm.
Covering class (against ignition)	Can be used as a floor covering (protection against ignition) that replaces the K <sub>10</sub> cover when the layer thickness is at least 25 mm and that replaces the K <sub>30</sub> cover when the layer thickness is at least 35 mm.
Wear resistance to rolling wheel of screed material for wearing layer (RWA)	RWA10 (EN 13813)
Durability	Water resistant
Water vapour diffusion coefficient (μ)	10 (dry) 6 (wet) (EN 12524:2001)
The pH of the cured material	10.5-11. Low alkaline.
Thermal conductivity	1 W/mK (EN 12524:2001)
Specific thermal capacity (Cp)	1 J/(g°C) (EN 12524:2001)
Color	Grey
Storage conditions	Shelf life is 12 months (20 kg) or 6 months (1000 kg sack) from the date of manufacture (unopened package, dry space). 3 months (storage time of bulk delivery). Longer storage will weaken the strength and spreadability characteristics of the product.
Package	20 kg sack. 1000 kg large sack. Bulk in a silo.
GTIN-codes	6415910032302 (20 kg) 6415990703543 (1000 kg) 6415990702539 (Bulk)
Certifications	CE, M1, EC1+, EPD, Key Flag Symbol

## MIXING

The product is mixed in clean water using a Weber-approved automatic mixer. A suitable amount of water is 20% (dry weight of the screed) equivalent to 4.0 litres

/ 20 kg sack. Mixing can also be done using a powerful drill whisk for at least 1 minute. The water content can be increased by a maximum of 0.2 litres / 20 kg sack. Pot life in normal conditions is approx. 15 min after adding water. The temperature of the screed must be at least +10 °C. In low temperatures, use warm water (max. +35 °C). The flow properties of the screed are checked before and during pumping (further instructions from Weber). Excess water causes segregation and weakens the strength of the screed surface, so an excessive amount of water must not be used.

## WORK INSTRUCTIONS

The building must have a roof, and windows and doorways must be closed. The substrate and air temperature during the levelling and for one week after should be between +10...+25 °C. Draught on the floor surface should be avoided during levelling and for three days after the work. The relative humidity of the substrate must be <90%. The maximum width of the pumped area is 6-8 m depending on the pump power and the thickness of the screed. Wider areas are divided into sections using temporary dividers. The pumping is carried out in sections so that the new section is pumped as quickly as possible partially to the previous one. Connecting sections while casting is aided using a wide steel trowel or by "wobbling". When spreading by hand use a steel trowel. Tools must be cleaned with water immediately after use. Hardened screed is removed from the tools mechanically.

### Covering time:

The screed can be coated after 1-7 days, depending on the layer thickness, drying conditions and coating.

### Movement joints:

At the movement joints of the substrate, the levelling layer is cut using an angle grinder, for example, as soon as the levelled surface supports foot traffic. The joints are filled with elastic sealing material.

## COATING

Setting time before using epoxy or acrylic coatings:  
When the 4655 levelling is done in good working conditions - temperature approx. +23 °C and humidity 50% - coating can be done when the screed strength is at least 1.5 MPa. This strength is usually reached in 3-5 days under the above conditions. It is important to remember

that the 4655 does not balance an already damp substrate. The surface of the levelling surface is sandblasted or sanded with coarse sandpaper before coating. The hardened screed is suitable as a floor surface for medium-load industrial spaces or water-soluble solvent-free epoxy surfaces (for example weberfloor 4736 Epoxy paint and paint priming with weberfloor 4712 Sealing epoxy - the suitability of other paints must be checked with the paint manufacturer). Moisture measurement and drying evaluation should be performed for the entire structure (substrate and screed) and the coating capacity should be evaluated accordingly.

Resin floors (PU, epoxy and acrylic-based): The suitability of the product must be checked from the manufacturer. weberfloor 4712 Sealing Epoxy should be used as a primer with acrylic products, unless otherwise instructed by the surface material manufacturer.

It is recommended to grind the screed surface before coating to remove any contaminants or other substances that weaken adhesion to the substrate.

## PLEASE OBSERVE

### Water resistance:

The hardened screed can withstand water. The strength of the completely wet screed decreases, but returns again when the material is completely dried.

### Chemical resistance:

The chemical resistance of the product is comparable to compact concrete. Floors exposed to ordinary chemicals, oils, cutting and cleaning fluids, etc. should be treated with a surface finish. Surface treatment is also recommended for the food industry, slaughterhouses, dairies, fish processing plants, etc.

## DISCLAIMER

As there are different conditions at every opportunity, Weber can not be held responsible for anything other than the information provided under the heading "Product Specification". Examples of information and circumstances, which are outside Saint-Gobain (whether specifically stated or not) include storage, construction, processing, interoperability with other products, workmanship and local conditions.