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POLYTECHNISCH BEDRIJF BVBA/SPRL – P.T.B.-COMPAKTUNA® INDUSTRIEPARK ZWIJNAARDE 6 9052 GENT – BELGIUM
11 001/CPR/130701 EN 934-3+A1
<b>COMPAKTUNA®</b> Luchtinbrenger / Plastificeerder/ Entraîneur d'air / Plastifiant Air entraining / Plasticizing Plastifizierer / Luftporenbildner Plastificeringsmiddel / Luftindblandingsmiddel EN 934-3+A1, T.2
Chloride gehalte/Teneur en chlorure/Chloride content/ Chlorid Gehalt/Kloridindhold/ < 0,1% m/m Alkali gehalte/Teneur en alcalins/Alkali content/ Alkali Gehalt/Alkaliindhold < 0,5% m/m Corrosief gedrag / Comportement à la corrosion /Corrosion behaviour/ Korrosionsverhalten / Korrosion adfærd: contains components only from EN 934-1 Annex A.1.



### Characteristics

A stable, white, rubbery plastic dispersion, specially composed and tuned, used as a plastic bonding agent with cement, mortar, plaster, lime plaster and the like. COMPACTUNA® refines and improves all mortar and, blended with the mixing water, introduces numerous properties and characteristics that lead to applications hitherto unknown or not thought possible.



### Properties

COMPACTUNA® mortar receives the following properties:

- Rock-solid adhesion:** 10 to 15 times stronger than ordinary mortar
- Tear resistant:** a plaster application (3 mm) on a mantelpiece remains completely without fissures or cracks after 4 years of use.
- Waterproof:** proven scientifically and in practice. Positive results.
- Elastic:** flexible - tractable mortar is possible
- Dust-free:** all parts are bonded with resin.
- Resistant to wear and tear:** is impervious to traffic of conveyances with metal wheels. Wear resistance complies to EN 13813.
- Frost and heat resistant:** of COMPACTUNA® mortar complies to EN 12004.
- Grease, oil, and gasoline resistant.**



### Advantages

The VOC content of COMPACTUNA® is lower than 3%.

Thin quality layers – less weight – reduced download – no mass materials – faster positioning – quicker drying action – faster use – longer lasting – fewer risks – economical.



+30°

### Instructions for specifications (example)

+5°

The works must be carried out with an aqueous caustic dispersion having a specific composite composition (COMPACTUNA®) satisfying the following physical characteristics:

Viscosity: ± 4500 mPa.s - Density: ± 1,08 g/ml - pH: ± 4,5

Prisms manufactured with a mortar prepared with this dispersion show a penetration of water of only a couple of mm after being submerged in water, and this unlike the blank, which already is saturated after 1 hour. Due to this increased watertightness, adding this dispersion increases the mortar's resistance to chemical products.

This dispersion confers a mortar high resistance values (resistance against pressure, bending and adhesion), and this when stored in both dry and humid conditions. The dispersion must give an exceptional flexibility to a mortar having the following composition: 100 g of cement, 200 g of sand and 100 g of COMPACTUNA® in a 2 mm thick cementation. The work must be carried out according to the mixing ratios and directives for the use of the plastic dispersion (COMPACTUNA®) indicated by the manufacturer.

Special instructions and scientific certificates are available on request.

## Application example

### **NATURAL STONE (slabs)**

#### **COMPAKTUNA® BONDING MORTAR FOR ANCHORING OF JURA, SLATE, QUARTZITE, MARBLE, BLEU STONE, CERAMICS, ETC.**

##### **1. Nature and preparation of the substrate**

It must be sound and solid as well as completely free of dust, dirt and loose particles. After cleaning it is always necessary to rinse the area to be covered with a little water. The same prescriptions also apply to the panels one wishes to bond.

##### **2. Glueing of natural stone panels**

On the substrate cleaned in that way and the back of the panel, the required adhesion can be obtained with certainty using the COMPAKTUNA® mortar. One always obtains an extraordinary adhesion when the panels are installed on walls, facades, columns or floors with:

##### **3. Using a mortar composition consisting of:**

First, mix 1 part by volume of cement CEM II B/M-32,5 with 2 to 3 parts by volume of riversand. (The use of white cement is recommended for natural stone) Prepare this dry mixture with a solution of 1 part by volume of COMPAKTUNA® + 1 to 2 parts by volume of pure water. Make this mortar into a plastic paste.

First of all, one covers or spreads the glue side of the panel with a layer of COMPAKTUNA® mortar approx. 1 to 2 mm thick. Next the same layer of COMPAKTUNA® mortar is placed on the wall, the floor or the substrate on to which one wishes to fix the panel. The thickness of the mortar layer depends on the flatness of the substrate. On a flat concrete or cellular concrete surface or on any perfectly flat wall surface, one layer 2 to 3 mm thick will be sufficient. The panel is laid flat in this bath of COMPAKTUNA® mortar and pressed down according to the rules of an expert job.

##### **4. On a extremely uneven substrate**

A layer of mortar 2-3 mm thick will be insufficient. In some cases, even a layer thickness of 10 mm is required. In this case the job can be economically done by means of the so-called bonding bridge. The bonding bridge is a coating, which is applied on the glue side of the panels one or more days before installation. This coating or bonding bridge has the following composition: in a COMPAKTUNA®/ water solution made of 1 part of COMPAKTUNA® on 1 to 2 parts of water, a dry mixture of 1 part of cement and 1 part of coarse riversand is stirred in a proportion until a thick mass is obtained. This mass is the bonding bridge, which is spread on the side to be glued of the panel by means of a coarse brush at a thickness of 1 to 2 mm. Let this coating dry during at least 12 hours so that it sticks solidly to the panel. In that way a gritty adhesion plane or bonding bridge is obtained, which will be strongly anchored with the layer of mortar to be used for the fixing of the panels. It will then be sufficient to prepare a mortar using a COMPAKTUNA®/water solution 1-5 so that a more economic but yet guaranteed execution is possible, even when it is necessary to use a thick layer of mortar.



## 5. Filling of the joints

... of natural stone must be done with great care and using a filler mortar of special quality. This filler mortar must be strongly adhesive, without cracks, resistant to frost and heat as well as impermeable. All these necessary requirements, which are indispensable in order to prevent serious damage to facade or floor coverings, both inside and outside, are present in a COMPAKTUNA® filler mortar. For normal grey or white filling of joints, the following filler mortar is recommended:

Mix 1 part by volume of cement with 2 to 3 parts by volume fine riversand or white sand. Make up this mixture with COMPAKTUNA®/water solution 1/3. For specific materials such as slate a dilution 1/1 can be indicated.

## 6. Useful advice

As soon as the applied filler mortar has become stiff to a certain extent, the edges of the panels along the joints must be dry-cleaned from any sticking mortar. It concerns here a very sticky COMPAKTUNA® mortar, which after having completely dried is very difficult to remove from the natural stone.

For other applications: see our COMPAKTUNA® - brochure (on demand)

Colours	Packaging	Application temperature
White	1 l (24 pcs/cardboard box), 5 l, 10 l and 25 l	+ 5°C till + 30°C

## Mixing ratio & consumption COMPAKTUNA® & COMPAKTUNA® PRO

Application	Volume mixing ratio cement/sand	Volume mixing COMPAKTUNA® (PRO)/water	Thickness	Surface / litre COMPAKTUNA® (PRO)
<b>Base coating</b>				
for porous surface	-	1/4	-	20 m <sup>2</sup> /litre or 0,05 litre/m <sup>2</sup>
<b>Bonding bridge</b>				
for brickwork, concrete,...	1/1	1/2	± 2 mm	7 m <sup>2</sup> /litre or 0,07 litre/m <sup>2</sup> /mm
for slate tiling, polished concrete, insulation plate,... (2)	1/1	1/1	± 2 mm	5 m <sup>2</sup> /litre or 0,10 litre/m <sup>2</sup> /mm
<b>Bonding mortar</b>				
for faience, ceramics & mosaic	1/2 to 1/3	1/2	2 to 3 mm	5 m <sup>2</sup> /litre or 0,08 litre/m <sup>2</sup> /mm
for natural stone & insulation plates (1) (2)	1/2 to 1/5	1/1	2 to 3 mm	4 m <sup>2</sup> /litre or 0,13 litre/m <sup>2</sup> /mm
<b>Placing mortar</b>				
for faience, ceramics & natural stone (1) (2)	1/3	1/3	10 mm	2 m <sup>2</sup> /litre or 0,05 litre/m <sup>2</sup> /mm
<b>Jointing mortar</b>				
for facades - moist	1/3 to 1/4	1/4	12 x 15 mm	140 running m joint/litre or 7 ml/joint meter
for inside floors - pasty and powdering	1/3 to 1/4	1/6	5 x 10 mm	250 running m joint/litre or 4 ml/joint meter
for faience - pasty	1/3	1/3	3 x 8 mm	625 running m joint/litre or 1,6 ml/joint meter
for natural stone & terraces - moist	1/3	1/3	10 x 10 mm	77 running m joint/litre or 13 ml/joint meter
<b>Screed layer/cement based plaster layer on cementitious surfaces</b>				
very thin concrete reparations	1/2	1/1	up to 1 mm	8 m <sup>2</sup> /litre or 0,13 litre/m <sup>2</sup> /mm
thin concrete reparations	1/2	1/2	up to 2 mm	12 m <sup>2</sup> /litre or 0,085 litre/m <sup>2</sup> /mm
concrete reparation - thin wearing course (1)	1/2,5	1/3	up to 5 mm	16 m <sup>2</sup> /litre or 0,064 litre/m <sup>2</sup> /mm
adhesive wearing course (1)	1/3	1/4	up to 10 mm	2,3 m <sup>2</sup> /litre or 0,43 litre/m <sup>2</sup> /mm
screed (1)	1/3	1/5	up to 50 mm	2,5 m <sup>2</sup> /litre or 0,40 litre/m <sup>2</sup> /mm
cement screed	1/4	1/8	up to 80 mm	2,7 m <sup>2</sup> /litre or 0,27 litre/m <sup>2</sup> /mm
<b>Waterproof cement rendering - COMPAKTUNA® PRO</b>				
general outside cementitious renders (1)	1/2,5 to 1/3	1/4	10 mm	0,5 litre/m <sup>2</sup> /cm thickness
for cellars, rainwater inlets, swimming pools (3)				
<b>Masonry mortar</b>				
for extra adhesive power	1/3 to 1/4	1/5	12 x 140 x 1000 mm	14 running meter/litre
<b>Gypsum plaster mortar</b>				
for extra adhesive power & more waterproof	-	1/6	5 mm	2 m <sup>2</sup> /litre/5 mm or 1 litre/m <sup>2</sup> /cm

The consumptions gives above are guidelines given in good faith, function from the type of cement, sand, the surface and the general working conditions.

- (1) with a bonding bridge
- (2) for applications with natural stones, white cement is recommended
- (3) see manual for waterproof cellars