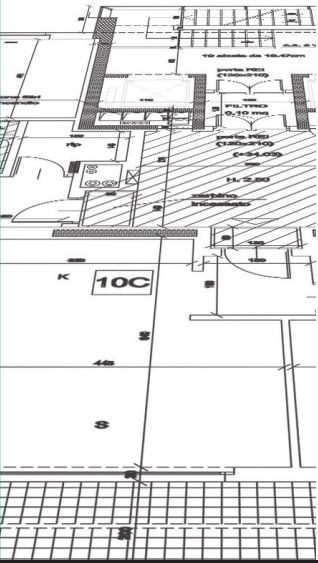


INSTALLATION OF RESILIENT AND TEXTILE FLOORING AND WALL COVERINGS



B specifications of **INSTALLATION OF RESILIENT AND TEXTILE FLOORING AND WALL COVERINGS**

B.1 ***INSTALLATION OF RESILIENT AND TEXTILE FLOORING***

Introduction

MAPEI systems for installing resilient and textile flooring

B.1.1 **INSTALLING HOMOGENEOUS AND HETEROGENEOUS VINYL FLOORING WITH PVC OR POLYURETHANE FOAM BACKING**

Procedure

B.1.2 **INSTALLING RUBBER FLOORING**

Procedure

B.1.3 **INSTALLING LINOLEUM FLOORING**

Procedure

B.1.4 **INSTALLING CORK FLOORING**

Procedure

B.1.5 **INSTALLING TEXTILE FLOORS**

Procedure

B.2 ***APPLICATION OF WALL COVERINGS***

Introduction

MAPEI systems for applying wall coverings

B.2.1 **APPLYING WALLPAPER**

Procedure

B.2.2 **APPLYING TEXTILE WALL COVERINGS**

Procedure

B.2.3 **APPLYING VINYL WALL COVERINGS**

Procedure

B.2.4 **APPLYING CORK WALL COVERINGS**

Procedure

Introduction

MAPEI systems for installing resilient and textile flooring

– **Mapecryl Eco**

Acrylic adhesive in water dispersion with very low emission of volatile organic compounds (EMICODE EC1), suitable for installing textile and vinyl flooring.

– **Ultrabond Eco 170**

Adhesive in water dispersion with a rapid, strong initial grab and very low emission of volatile organic compounds (EMICODE EC1 Plus), specifically developed for textile flooring.

– **Ultrabond Eco 380**

Adhesive in water dispersion with a rapid, strong initial grab, extended open time and very low emission of volatile organic compounds (EMICODE EC1 Plus), suitable for installing vinyl flooring.

– **Ultrabond Eco V4SP**

Multi-purpose adhesive in water dispersion with very low emission of volatile organic compounds (EMICODE EC1 Plus, Der Blaue Engel).

– **Ultrabond Eco 310**

Quick-setting adhesive in water dispersion for multi-layered cork flooring.

– **Ultrabond Eco 520**

Adhesive in water dispersion with a rapid, strong initial bond and very low emission of volatile organic compounds (EMICODE EC 1 Plus), specific for linoleum flooring.

– **Adesilex G19**

Two-component epoxy-polyurethane adhesive for installing rubber and PVC flooring, including onto non-absorbent substrates and substrates subject to intense traffic.

– **Adesilex UP71**

Two-component, solvent and water-free polyurethane adhesive with very low emission of volatile organic compounds (EMICODE EC1 R Plus) for bonding internal PVC and rubber flooring, including onto non-absorbent substrates.

– **Ultrabond Eco Fix**

Adhesive in water dispersion with permanent tack and very low emission of volatile organic compounds (EMICODE EC1) for resilient or textile floor tiles. Allows tiles to be removed and reinstalled several times.

– **Mapecontact**

Reinforced double-sided adhesive tape for installing profiles, PVC skirtings, base-boards, fillets and resilient and textile flooring including on stairs.

– **Ultrabond Aqua-Contact Cork**

Solvent-free, double sided elastomeric adhesive in water dispersion with very low emission of volatile organic compounds (EMICODE EC1) for installing flooring where an immediate bond is required.

– **Granirapid**

Two-component, rapid-setting and hydrating cementitious adhesive system (EMICODE EC1 R Plus), suitable for bonding rubber on cement (thickness of adhesive up to 10 mm).

How to choose the most suitable solution

Before installing resilient and textile materials, it is extremely important that the substrate is thoroughly checked. These types of coverings are not stable enough to distribute loads evenly, so the strength of the whole substrate must be constant throughout to guarantee that concentrated point loads do not cause it to indent.

The compressive strength of the screed must be calculated according to the static and dynamic loads which act on the floor. From experience, a minimum of 25 MPa is recommended for environments subject to heavy traffic.

Apart from the perfect flatness and uniformity of the screed, the most critical point when installing resilient materials is the level of residual moisture in the screed, and it is indispensable that it is measured to prevent the floor covering bubbling or debonding. The level of residual moisture is checked with a calibrated hair hygrometer dependent on the type of substrate used and must comply with the values recommended by the manufacturer of the floor covering and with current relevant standards.

B.1.1 INSTALLING HOMOGENEOUS AND HETEROGENEOUS VINYL FLOORING WITH PVC OR POLYURETHANE FOAM BACKING Procedure

Checking and preparing substrates

The surface of the screed must be of sound construction, well compacted, clean, smooth and flat and crack free. All curing agents must be removed by mechanical means (such as scarifying or shot blasting).

If cracks are present when checking the surface, carefully clean the screed when it has cured and all movement has stopped in fill using **Eporip** (see section **F.7.1.3**) two-component, epoxy adhesive to monolithically seal them before applying a smoothing compound and installing the flooring.

The installation surface must be flat. Removal of surface roughness and small corrections in flatness may be carried out by skimming the surface with a cementitious product suitable to the thickness required (see section **R.1.3**).

Substrates must be completely dry before installing vinyl flooring. On substrates with continuous rising damp, the screed must be checked to make sure it has been installed on a suitable vapour barrier. If there is no vapour barrier, it will not be possible to install the flooring using standard techniques.

The maximum permitted level of residual humidity in a 4-5 cm thick cementitious screed is approximately 2-2.5%. In all cases, the requirements of the manufacturer of the flooring must be strictly adhered to.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, installation may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Installing the flooring

The flooring material and adhesives must be acclimatised to the surrounding area for at least 24 hours. Sheets must be unrolled and laid out, while tiles must be taken out of their packaging and placed on a flat surface to prevent them deforming. Acclimatise particularly large sheets by loosening or removing the packaging and standing the rolls upright to loosen the coils.

In compliance with the instructions supplied by the manufacturer, install the flooring at an ambient temperature of $+18^{\circ}\text{C} \pm +3^{\circ}\text{C}$.

The type of adhesive must be chosen according to the type of environment, material selected and the absorption of the substrate. The installation technique will depend on which adhesive is used.

If an adhesive in water dispersion is used, spread the adhesive on the substrate using a trowel suitable for the thickness of adhesive applied and for the type of flooring. The open time of the adhesive must be respected to increase its tack and allow the water in the product to evaporate off before installing the flooring. It is very important that the open time limit is not exceeded to guarantee good adhesion. The lower the absorbency of the substrate, the longer the waiting time before installing the flooring.

If a reactive adhesive is used, the flooring may be installed immediately after spreading on the adhesive.

For absorbent substrates and normal service conditions, install the flooring using **Mapecryl Eco** (see section **B.1.1.1**). If an adhesive with strong initial grab is required, use **Ultrabond Eco 380** (see section **B.1.1.2**). If a multi-purpose adhesive with extended open time is required, the flooring may be installed using **Ultrabond Eco V4SP** (see section **B.1.1.3**).

Install flooring on non-absorbent substrates or for service conditions subject to heavy traffic using **Adesilex G19** (see section **B.1.1.4**).

For the installation of vinyl floor tiles, use a permanent tack adhesive such as **Ultrabond Eco Fix** (see section **B.1.1.5**).

Steps, fillets and elements which need to form an immediate bond may be installed using **Mapecontact** (see section **B.1.1.6**).

Roll the surface of the flooring immediately after installation, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.1 Installing vinyl flooring using adhesive in water dispersion

Supply and installation of sheets or tiles of homogeneous, heterogeneous vinyl flooring with PVC or polyurethane foam backing in any geometric pattern after checking and preparing the installation surface according to specification, using acrylic adhesive in water dispersion with very low emission of volatile organic compounds (such as **Mapecryl Eco** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.40
Waiting time:	0-10 minutes
Open time:	30 minutes
Set to foot traffic:	approximately 2 hours
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.2 Installing vinyl flooring using adhesive in water dispersion with strong initial grab

Supply and installation of sheets or tiles of homogeneous, heterogeneous vinyl flooring with PVC or polyurethane foam backing in any geometric pattern after checking and preparing the installation surface according to specification, using acrylic adhesive in water dispersion with strong initial grab, extended open time and very low emission of volatile organic compounds (such as **Ultrabond Eco 380** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.22
Waiting time:	10-20 minutes
Open time:	70 minutes
Set to foot traffic:	3-4 hours
EMICODE:	EC1 Plus

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size and sealing where required;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.3 Installing vinyl flooring using adhesive in water dispersion with extended open time

Supply and installation of sheets or tiles of homogeneous, heterogeneous vinyl flooring with PVC or polyurethane foam backing in any geometrical pattern after checking and preparing the installation surface according to specification, using acrylic adhesive in water dispersion with extended open time and very low emission of volatile organic compounds (such as **Ultrabond Eco V4SP** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.2
Waiting time:	10-20 minutes (30-40 minutes on non-absorbent substrates)
Open time:	40-45 minutes
Set to foot traffic:	3-5 hours
EMICODE:	EC1 Plus
Certification:	DER BLAUE ENGEL

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

– per square metre

.....(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.4 Installing vinyl flooring, including for intense traffic use or on non-absorbent substrates

Supply and installation of sheets or tiles of homogeneous, heterogeneous vinyl flooring with PVC or polyurethane foam backing in any geometric pattern after checking and preparing the installation surface according to specification, using two-component epoxy-polyurethane adhesive (such as **Adesilex G19** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density of mix (kg/m ³):	1450
Pot life of mix:	50-60 minutes
Open time:	1 hour
Time to completely set:	9 hours
Set to foot traffic:	12-24 hours

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size and sealing where required;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.5 Installing vinyl floor tiles using adhesive in water dispersion with permanent tack

Supply and installation of vinyl floor tiles after checking and preparing the installation surface according to specification, using adhesive in water dispersion with permanent tack (such as **Ultrabond Eco Fix** produced by MAPEI S.p.A.)

The adhesive used to install the floor tiles must have the following characteristics:

Density (g/cm ³):	1.07
Waiting time:	30 minutes to 12 hours
Set to foot traffic:	immediately after installation
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size and sealing where required;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.1.6 Installing vinyl flooring where an immediate bond is required using double-sided adhesive tape

Supply and installation of vinyl profiles, baseboards, PVC skirtings, fillets and vinyl dressings in general where an immediate bond is required after checking and preparing the installation surface according to specification, using reinforced double-sided adhesive tape (such as **Mapecontact** produced by MAPEI S.p.A.).

The double-sided adhesive tape used to install the dressing must have the following characteristics:

Weight per m ² :	0.38 kg/m ²
Waiting time:	immediate bond
Set to foot traffic:	immediate

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1.2 INSTALLING RUBBER FLOORING Procedure

Checking and preparing substrates

The surface of the screed must be of sound construction, well compacted, clean, smooth, flat and crack free. All curing agents must be removed by mechanical means (such as scarifying or shot blasting).

If cracks are present when checking the surface, carefully clean the screed when it has cured and all movement has stopped infill using **Eporip** (see section **F.7.1.3**), two-component, epoxy adhesive to monolithically seal them before applying a smoothing compound and installing the flooring.

The installation surface must be flat. Removal of surface roughness and small corrections in flatness may be carried out by skimming the surface with a cementitious product suitable to the thickness required (see section **R.1.3**).

Substrates must be completely dry before installing rubber flooring. On substrates with continuous rising damp, the screed must be checked to make sure it has been installed on a suitable vapour barrier. If there is no vapour barrier, it will not be possible to install the flooring using standard techniques.

The maximum permitted level of residual humidity in a 4-5 cm thick cementitious screed is approximately 2-2.5%.

In all cases, the prescriptions of the manufacturer of the flooring must be strictly adhered to.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, installation may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Installing the flooring

The flooring material and adhesives must be acclimatised to the surrounding area for at least 24 hours. Sheets must be unrolled and laid out, while tiles must be taken out of their packaging and placed on a flat surface to prevent them deforming. Acclimatise particularly large sheets by loosening or removing the packaging and standing the rolls upright to loosen the coils.

In compliance with the instructions supplied by the manufacturer, install the flooring at an ambient temperature of $+18^{\circ}\text{C} \pm +3^{\circ}\text{C}$.

The type of adhesive must be chosen according to the type environment, material selected and the absorption of the substrate. The installation technique will depend on which adhesive is used.

If an adhesive in water dispersion is used, spread the adhesive on the substrate using a trowel suitable for the thickness of adhesive applied and for the type of flooring. The open time of the adhesive must be respected to increase its tack and allow the water in the product to evaporate off before installing the flooring. It is very important that the open time limit is not exceeded to guarantee good adhesion. The lower the absorbency of the substrate, the longer the waiting time before installing the flooring.

If a reactive adhesive is used, the flooring may be installed immediately after spreading the adhesive.

For absorbent substrates and normal service conditions, install natural finish or dimpled rubber flooring with a smooth back using **Ultrabond Eco V4SP Fiber**(see section **B.1.2.1**)

For absorbent substrates, install the flooring using **Adesilex UP71**(see section **B.1.2.2**), while for areas subject to high traffic use **Adesilex G19** (see section **B.1.2.3**). For bonding, use a permanent tack adhesive such as **Ultrabond Eco Fix**(see section **B.1.2.4**).

Steps, fillets and elements which need to form an immediate bond may be installed using **Mapecontact** (see section **B.1.2.5**).

For overlaying rubber on cement use a cementitious adhesive such as **Granirapid** (see section **B.1.2.6**), making sure that the bed thickness of the adhesive is sufficient to penetrate into the depth of the ribs on the back of the rubber and form a bond. Roll the surface of the flooring immediately after installation, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.1 Installing natural finish or studded rubber flooring with a smooth back face using a multi-purpose acrylic adhesive in water dispersion

Supply and installation of natural finish or studded rubber flooring with a smooth back in any geometric pattern after checking and preparing the installation surface according to specification, using acrylic adhesive in water dispersion with extended open time and very low emission of volatile organic compounds (such as **Ultrabond Eco V4SP** Fiber produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.2
Waiting time:	10-20 minutes (30-40 minutes on non-absorbent substrates)
Open time:	30-40 minutes
Set to foot traffic:	3-5 hours
EMICODE:	EC1 Plus
Certification:	DER BLAUE ENGEL

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.2 Installing rubber flooring, including on non-absorbent substrates, using a two-component polyurethane adhesive

Supply and installation of rubber flooring in any geometric pattern after checking and preparing the installation surface according to specification, using two-component, water and solvent-free polyurethane adhesive (such as **Adesilex UP71** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density of mix (kg/m ³):	1550
Pot life of mix:	30 minutes
Open time:	50-60 minutes
Time to completely set:	4 hours
Set to foot traffic:	12-24 hours
EMICODE:	EC1 R Plus

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

– per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.3 Installing rubber flooring, including high traffic areas or on non-absorbent substrates, using epoxy-polyurethane adhesive

Supply and installation of sheets or tiles of rubber flooring in any geometric pattern after checking and preparing the installation surface according to specification, using two-component epoxy-polyurethane adhesive (such as **Adesilex G19** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density of mix (kg/m ³):	1450
Pot life of mix:	50-60 minutes
Open time:	1 hour
Time to completely set:	9 hours
Set to foot traffic:	12-24 hours

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.4 Installing rubber floor tiles using adhesive in water dispersion with permanent tack

Supply and installation of rubber floor tiles after checking and preparing the installation surface according to specification, using adhesive in water dispersion with permanent tack (such as **Ultrabond Eco Fix** produced by MAPEI S.p.A.)

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.07
Waiting time:	30 minutes to 12 hours
Set to foot traffic:	immediately after installation
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.5 Installing rubber dressings where an immediate bond is required using double-sided adhesive tape

Supply and Installation of rubber profiles, baseboards, fillets and rubber materials in general where an immediate bond is required after checking and preparing the installation surface according to specification, using reinforced double-sided adhesive tape (such as **Mapecontact** produced by MAPEI S.p.A.).

The double-sided adhesive tape used to install the material must have the following characteristics:

Weight per m ² :	0.38 kg/m ²
Waiting time:	immediate bond
Set to foot traffic:	immediate

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.2.6 Installing rubber flooring on cement based adhesive

Supply and installation of rubber flooring on cement based adhesive after checking and preparing the installation surface according to specification using two-component, rapid-setting and hydrating cementitious adhesive with very low emission of volatile organic compounds (such as **Granirapid** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density of mix (g/cm ³):	1.01
Pot life of mix:	45 minutes
Open time:	20 minutes
Setting time:	2 hours
Set to foot traffic:	3-4 hours
EMICODE:	EC1 R Plus

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1.3 INSTALLING LINOLEUM FLOORING Procedure

Checking and preparing substrates

The surface of the screed must be of sound construction, well compacted, smooth, flat and crack free. All curing agents must be removed using mechanical means (such as scarifying or shot blasting). If cracks are present when checking the surface, carefully clean the screed when it has cured and all movement has stopped infill using **Eporip** (see section **F.7.1.3**) two-component, epoxy adhesive to monolithically seal them before applying a smoothing compound and installing the flooring.

The installation surface must be flat. Removal of surface roughness and small corrections in flatness may be carried out by skimming the surface with a cementitious product suitable to the thickness required (see section **R.1.3**).

Substrates must be completely dry before installing linoleum flooring. On substrates with continuous rising damp, the screed must be checked to make sure it has been installed on a suitable vapour barrier. If there is no vapour barrier, it will not be possible to install the flooring using standard techniques.

The maximum permitted level of residual humidity in a 4-5 cm thick cementitious screed is approximately 2-2.5%. In all cases, the requirements of the manufacturer of the flooring must be strictly adhered to.

Measure the level of humidity using a carbide hygrometer. If the screed incorporates pipe-work for a heating system, installation may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Installing the flooring

The flooring material and adhesives must be acclimatised to the surrounding area for at least 24 hours. Sheets must be unrolled and laid out.

In compliance with the instructions supplied by the manufacturer, install the flooring at an ambient temperature of $+18^{\circ}\text{C} \pm +3^{\circ}\text{C}$.

The type of adhesive must be chosen according to the type of environment, material selected and the absorption of the substrate. The installation technique will depend on which adhesive is used.

Install the flooring by spreading the adhesive on the substrate using a trowel suitable for the thickness of adhesive applied and for the type of flooring. The open time of the adhesive must be respected to increase its tack and allow the water in the adhesive to evaporate off before installing the flooring. It is very important that the open time limit is not exceeded to guarantee good adhesion. The lower the absorbency of the substrate, the longer the waiting time before installing the flooring.

Install linoleum flooring with natural jute backing using **Ultrabond Eco 520** (see section **B.1.3.1**).

Install linoleum flooring with synthetic jute backing using **Ultrabond Eco V4SP** (see section **B.1.3.2**).

Roll the surface of the flooring immediately after installation, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.3.1 Installing linoleum flooring with natural jute backing using adhesive in water dispersion with a very rapid, high initial bond

Supply and installation of linoleum flooring after checking and preparing the installation surface according to specification, using adhesive in water dispersion with a rapid, strong initial bond and very low emission of volatile organic compounds (such as **Ultrabond Eco 520** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.4
Waiting time:	0-20 minutes
Open time:	30-40 minutes
Set to foot traffic:	approximately 3 hours
EMICODE:	EC1 Plus

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

– per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.3.2 Installing linoleum flooring with synthetic jute backing using multi-purpose acrylic adhesive in water dispersion

Supply and installation of linoleum flooring with natural jute backing after checking and preparing the installation surface according to specification, using multi-purpose adhesive in water dispersion with extended open time and very low emission of volatile organic compounds (such as **Ultrabond Eco V4SP** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.2
Waiting time:	10-20 minutes (30-40 minutes on non-absorbent substrates)
Open time:	40-45 minutes
Set to foot traffic:	3-5 hours
EMICODE:	EC1 Plus
Certification:	DER BLAUE ENGEL

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



**B.1.4 INSTALLING CORK FLOORING
Procedure****Checking and preparing substrates**

The surface of the screed must be of sound construction, well compacted, smooth, flat and crack free. All curing agents must be removed by mechanical means (such as scarifying or shot blasting). If cracks are present when checking the surface, carefully clean the screed when it has cured and all movement has stopped and infill using **Eporip** (see section **F.7.1.3**) two-component, epoxy adhesive to monolithically seal them before applying a smoothing compound and installing the flooring. The installation surface must be flat. Removal of surface roughness and small corrections in flatness may be carried out by skimming the surface with a cementitious product suitable to the thickness required (see section **R.1.3**).

Substrates must be completely dry before installing cork flooring. On substrates with continuous rising damp, the screed must be checked to make sure it has been installed on a suitable vapour barrier. If there is no vapour barrier, it will not be possible to install the flooring using standard techniques. The maximum permitted level of residual humidity in a 4-5 cm thick cementitious screed is approximately 2-2.5%. In all cases, the requirements of the manufacturer of the flooring must be strictly adhered to.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, installation may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Installing the flooring

In compliance with the instructions supplied by the manufacturer, install the flooring at an ambient temperature of $+18^{\circ}\text{C} \pm +3^{\circ}\text{C}$.

The type of adhesive must be chosen according to the type of environment, material selected and the absorption of the substrate. The installation technique will depend on which adhesive is used.

If an adhesive in water dispersion is used, spread the adhesive on the substrate using a trowel suitable for the thickness of adhesive applied and for the type of flooring. The open time of the adhesive must be respected to increase its tack and allow the water in the product to evaporate off before installing the flooring. It is very important that the open time limit is not exceeded to guarantee good adhesion. The lower the absorbency of the substrate, the longer the waiting time before installing the flooring.

Install cork flooring using **Ultrabond Eco 310** (see section **B.1.4.1**).

When an immediate bond is required, use **Ultrabond Aqua-Contact Cork** (see section **B.1.4.2**).

Roll the surface of the flooring immediately after installation, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.4.1 Installing cork flooring using adhesive in water dispersion

Supply and installation of cork flooring after checking and preparing the installation surface according to specification, using rapid-setting adhesive in water dispersion (such as **Ultrabond Eco 310** produced by MAPEI S.p.A.)

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.25
Waiting time:	0-20 minutes
Open time:	30-40 minutes
Set to foot traffic:	3-4 hours

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size and sealing where required;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.4.2 Installing cork flooring using solvent-free, contact adhesive in water dispersion

Supply and installation of cork flooring after checking and preparing the installation surface according to specification, using solvent-free, double-buttering adhesive in water dispersion with very low emission of volatile organic compounds (such as **Ultrabond Aqua-Contact Cork** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.05
Waiting time:	30 minutes (60 minutes on non-absorbent substrates)
Open time:	5-6 hours
Set to foot traffic:	immediate
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size and sealing where required;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1.5 INSTALLING TEXTILE FLOORS Procedure

Checking and preparing substrates

The surface of the screed must be of sound construction, well compacted, smooth, flat and crack free. All curing agents must be removed by mechanical means (such as scarifying, sand-blasting or brushing).

If cracks are present when checking the surface, carefully clean the screed when cured and all movement has stopped infill using **Eporip** (see section **F.7.1.3**) two-component, epoxy adhesive to monolithically seal them before applying a smoothing compound and installing the flooring.

The installation surface must be flat. Removal of surface roughness and small corrections in flatness may be carried out by skimming the surface with a cementitious product suitable to the thickness required (see section **R.1.3**).

Before installation, check that the substrate is dry through its entire thickness. On substrates with continuous rising damp, the screed must be checked to make sure it has been installed on a suitable vapour barrier. If there is no vapour barrier, it will not be possible to install the flooring using standard techniques.

The maximum permitted level of residual humidity in a 4-5 cm thick cementitious screed is approximately 2.5-3%. In all cases, the recommendations of the manufacturer of the flooring must be strictly adhered to.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, installation may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Installing the flooring

The flooring material and adhesives must be acclimatised to the surrounding area for at least one day. Preparation and installation of the flooring must be in compliance with the instructions of the manufacturer.

In compliance with the instructions supplied by the manufacturer, install the flooring at an ambient temperature of $+18^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

The type of adhesive must be chosen according to the type of application and the absorption of the substrate. The installation technique will depend on which adhesive is used.

If an adhesive in water dispersion is used, spread the adhesive on the substrate using a trowel suitable for the thickness of adhesive applied and for the type of flooring. The waiting time of the adhesive must be respected to increase its tack and allow the water in the product to evaporate off before installing the flooring. It is very important that the open time limit is not exceeded to guarantee good adhesion. The lower the absorbency of the substrate, the longer the waiting time before installing the flooring.

Install needle-punch or latex-backed textile flooring using **Mapecryl Eco** (see section **B.1.5.1**). If a strong initial bond is required, use **Ultrabond Eco 170** (see section **B.1.5.2**).

Steps, fillets and elements which need to form an immediate bond may be installed using **Mapecontact** (see section **B.1.5.3**).

For the installation of self-laying flooring, use a permanent tack adhesive such as **Ultrabond Eco Fix** (see section **B.1.5.4**).

Massage the surface of the flooring with a wooden trowel or roller immediately after installation, starting from the centre and working towards the edges, to make sure it is perfectly buttered and to remove all air bubbles.

B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.5.1 Installing needle-punch or latex-backed textile flooring using acrylic adhesive in water dispersion

Supply and installation of needle-punch or latex-backed textile flooring in any geometric pattern after checking and preparing the installation surface according to specification, using acrylic adhesive in water dispersion with very low emission of volatile organic compounds (such as **Mapecryl Eco** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.40
Waiting time:	0-10 minutes
Open time:	30 minutes
Set to foot traffic:	approximately 2 hours
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
- cutting and trimming to size;
- cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges.

- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.5.2 Installing needle-punch or latex-backed textile flooring using adhesive in water dispersion with a very rapid, high initial bond

Supply and installation of needle-punch or latex-backed textile flooring after checking and preparing the installation surface according to specification, using adhesive in water dispersion with a rapid, strong initial bond and very low emission of volatile organic compounds (such as **Ultrabond Eco 170** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.35
Waiting time:	0 to 20 minutes
Open time:	30-40 minutes
Set to foot traffic:	approximately 3 hours
EMICODE:	EC1 Plus

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.5.3 Installing needle-punch or latex-backed textile flooring where an immediate bond is required using double-sided adhesive tape

Supply and installation of textile flooring where an immediate bond is required after checking and preparing the installation surface according to specification, using reinforced double-sided adhesive tape (such as **Mapecontact** produced by MAPEI S.p.A.).

The double-sided adhesive tape used to install the flooring must have the following characteristics:

Weight per m ² :	0.38 kg/m ²
Waiting time:	immediate bond
Set to foot traffic:	immediate

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



B.1 INSTALLATION OF RESILIENT AND TEXTILE FLOORING

B.1.5.4 Installing carpet tiles using adhesive in water dispersion with permanent tack

Supply and installation of carpet tiles after checking and preparing the installation surface according to specification, using adhesive in water dispersion with permanent tack (such as **Ultrabond Eco Fix** produced by MAPEI S.p.A.).

The adhesive used to install the flooring must have the following characteristics:

Density (g/cm ³):	1.07
Waiting time:	30 minutes to 12 hours
Set to foot traffic:	immediately after installation
EMICODE:	EC1

The following are included and calculated in the price for work completed according to specification:

- checking suitability of the installation surface;
 - cutting and trimming to size;
 - cleaning and removal of waste material upon completion of work, differential collection of waste material, transport and delivery of waste material to an authorised waste disposal site and all waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



Introduction

MAPEI systems for applying wall coverings

– **Adesilex MT32**

Acrylic adhesive in water dispersion, suitable for installing textile and vinyl flooring.

– **Rollcoll**

Adhesive in water dispersion with a rapid, high initial bond, specific for textile flooring.

– **Adesilex TDV**

Adhesive in water dispersion with a rapid, strong initial bond and extended open time, suitable for installing vinyl flooring.

– **Adesilex VS45**

Acrylic adhesive in water dispersion, suitable for applying PVC wall coverings.

– **Ultrabond Eco 310**

Quick-setting adhesive in water dispersion for multi-layered cork flooring and wall coverings

– **Mapecontact**

Reinforced double-sided tape for installing profiles, base-boards, fillets and resilient and textile coverings on steps.

B.2 APPLICATION OF WALL COVERINGS

B.2.1 APPLYING WALLPAPER Procedure

Checking and preparing substrates

Substrates must be dry, absorbent, strong and free of all contaminants and any other substance which could compromise the adhesion of the wallpaper.

Rough or uneven substrates must be skimmed as per the preparation of substrates (see section **R.1.3**).

The level of humidity must be lower than the level recommended by the manufacturer of the wallpaper. For cementitious render and cement walls the reference value is usually 2.5-3%, for gypsum wall coating a maximum of 0.5%.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, application may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Applying the wallpaper

Before applying the adhesive, the wallpaper and walls must be acclimatised to the temperature prescribed by the manufacturer of the wallpaper (usually around +18°C with a tolerance of $\pm 3^{\circ}\text{C}$). The wallpaper must be removed from its packaging for 24 hours before application. Sheets must be either unrolled and laid out, or the rolls must be loosened to acclimatise them and to remove stresses caused by the packaging.

Before installing the wallpaper, treat the walls with a coat of **Adesilex MT32** diluted 1 to 2 with clean water allow to dry.

Apply wallpaper using **Adesilex MT32** (see section **B.2.1.1**). Spread the adhesive on the back of the wallpaper and leave it to soak for approximately 10-20 minutes before applying it to the wall.

Smooth the surface of the flooring applying light pressure with a brush or wooden trowel immediately after application, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.2 APPLICATION OF WALL COVERINGS

B.2.1.1 Applying wallpaper

Supply and application of heavyweight, vinyl, fabric or needle-punch wallpaper after preparing surfaces with a natural-finish skimming layer or by sanding, using adhesive in water dispersion (such as **Adesilex MT32** produced by MAPEI S.p.A.).

The adhesive used to apply the wallpaper must have the following characteristics:

Density (g/cm ³):	1.10
Waiting time:	0-10 minutes
Open time:	30 minutes
Setting time:	approximately 6-8 hours

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- *per square metre*(€/m²)



B.2.2 APPLYING TEXTILE WALL COVERINGS Procedure

Checking and preparing substrates

Substrates must be dry, absorbent, strong and free of all contaminants and any other substance which could compromise the adhesion of the wall covering.

Rough or uneven substrates must be skimmed as per the preparation of substrates (see section **R.1.3**).

The level of humidity must be lower than the level recommended by the manufacturer of the covering. For cementitious render and cement walls the reference value is usually 2.5-3%, for gypsum wall coating a maximum of 0.5%.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, application may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Applying the wall covering

Before applying the adhesive, the wall covering and walls must be acclimatised to the temperature prescribed by the manufacturer of the wall covering material (usually around +18°C with a tolerance of $\pm 3^\circ\text{C}$). The material must be removed from its packaging for 24 hours before application. Sheets must be either unrolled or laid out, or the rolls must be loosened to acclimatise them and to remove stresses caused by the packaging.

Apply fabric, vinyl fabric or wall carpet using **Adesilex MT32** (see section **B.2.2.1**). In this case, treat the walls with a coat of **Adesilex MT32** diluted 1 to 2 with water and leave them to dry before applying the dressing.

Apply needle-punch wall coverings or wall carpet using **Rollcoll** (see section **B.2.2.2**).

Apply glass fibre fabric using **Adesilex TDV** (see section **B.2.2.3**).

Spread the adhesive on the walls using a fine-notched trowel (n.1 trowel) or a roller (dilute **Adesilex MT32** with 10-15% of water and **Rollcoll** with 5% of water).

Then apply sheets of material one after the other within the open time of the adhesive. Smooth the surface of the wall covering applying light pressure with a brush or wooden trowel immediately after application, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.2 APPLICATION OF WALL COVERINGS

B.2.2.1 Applying wall fabrics, vinyl fabrics or wall carpet

Supply and application of heavyweight, vinyl, fabric or needle-punch wallpaper after preparing surfaces with a natural-finish skimming layer or by sanding, using adhesive in water dispersion (such as **Adesilex MT32** produced by MAPEI S.p.A.).

The adhesive used to apply the wallpaper must have the following characteristics:

Density (g/cm ³):	1.10
Waiting time:	0-10 minutes
Open time:	30 minutes
Setting time:	approximately 6-8 hours

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



B.2 APPLICATION OF WALL COVERINGS

B.2.2.2 Applying needle-punch wall coverings or wall carpet

Supply and application of heavyweight, vinyl, fabric or needle-punch wallpaper after preparing surfaces with a natural-finish skimming layer or by sanding, using multi-purpose, rapid-setting adhesive in water dispersion (such as **Rollcoll** produced by MAPEI S.p.A.).

The adhesive used to apply the wallpaper must have the following characteristics:

Density (g/cm ³):	1.35
Waiting time:	0-10 minutes for roller or spray-applied; 0-30 minutes for trowel-applied
Open time:	max. 30 minutes for roller or spray-applied; max. 60 minutes for trowel-applied

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



B.2 APPLICATION OF WALL COVERINGS

B.2.2.3 Applying glass fibre fabric

Supply and application of glass fibre fabric after preparing surfaces with a natural-finish skimming layer or by sanding, using ready-to-use adhesive in water dispersion (such as **Adesilex TDV** produced by MAPEI S.p.A.).

The adhesive used to apply the fabric must have the following characteristics:

Density (g/cm ³):	1.05
Waiting time:	5-10 minutes
Open time:	max. 20 minutes
Setting time:	approximately 48 hours

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- *per square metre*(€/m²)



B.2 APPLICATION OF WALL COVERINGS

B.2.3 APPLYING VINYL WALL COVERINGS Procedure

Checking and preparing substrates

Substrates must be dry, absorbent, strong and free of all contaminants and any other substance which could compromise the adhesion of the wall covering.

Incoherent or uneven substrates must be skimmed as per the preparation of substrates (see section **R.1.3**).

The level of humidity must be lower than the level recommended by the manufacturer of the covering. For cementitious render and cement walls the reference value is usually 2.5-3%, for gypsum render a maximum of 0.5%.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, application may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Applying the dressing

Before applying the adhesive, the wall covering and walls must be acclimatised to the temperature prescribed by the manufacturer of the wall covering (usually around +18°C with a tolerance of $\pm 3^{\circ}\text{C}$). The material must be removed from its packaging for 24 hours before application. Sheets must be either unrolled and laid out, or the rolls must be loosened to acclimatise them and to remove stresses caused by the packaging.

Apply vinyl wall covering using **Adesilex VS45** (see section **B.2.3.1**).

Spread the adhesive on the walls using a notched trowel and apply the covering after the recommended waiting time, when the adhesive still has the capacity of transferring onto the back of the covering.

Smooth the surface of the wall covering with a brush or wooden trowel applying light pressure immediately after application, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

To apply profiles or wall coverings which require an immediate bond, use **Mapecontact** (see section **B.2.3.2**).

B.2 APPLICATION OF WALL COVERINGS

B.2.3.1 Applying vinyl wall coverings

Supply and application of vinyl wall covering after preparing surfaces with a natural-finish skimming layer or by sanding, using acrylic adhesive in water dispersion (such as **Adesilex VS45** produced by MAPEI S.p.A.).

The adhesive used to apply the wall covering must have the following characteristics:

Density (g/cm ³):	1.32
Waiting time:	0-15 minutes
Open time:	30-40 minutes
Setting time:	24 hours

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- per square metre(€/m²)



B.2 APPLICATION OF WALL COVERINGS

B.2.3.2 Installing vinyl wall coverings where an immediate bond is required

Supply and Installation of vinyl wall coverings where an immediate bond is required after preparing surfaces with a natural-finish skimming layer or by sanding, using reinforced double-sided adhesive tape (such as Mapecontact produced by MAPEI S.p.A.).

The double-sided adhesive tape used to install the covering must have the following characteristics:

Weight per m ² :	0.38 kg/m ²
Waiting time:	immediate bond
Set to foot traffic:	immediate

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- *per square metre*(€/m²)

B.2 APPLICATION OF WALL COVERINGS

B.2.4 APPLYING CORK WALL COVERINGS Procedure

Checking and preparing substrates

Substrates must be dry, absorbent, strong and free of all contaminants any other substance which could compromise the adhesion of the wall covering.

Rough or uneven substrates must be skimmed as per the preparation of substrates (see section **R.1.3**).

The level of humidity must be lower than the level recommended by the manufacturer of the covering. For cementitious render and cement walls the reference value is usually 2.5-3%, for gypsum render a maximum of 0.5%.

Measure the level of humidity using a calibrated hair hygrometer. If the screed incorporates pipe-work for a heating system, application may only be carried out after commissioning the heating system as prescribed in UNI EN 1264-4:2003 standards.

Applying the coverings

Before applying the adhesive, the wall covering and walls must be acclimatised to the temperature prescribed by the manufacturer of the wall covering (usually around +18°C with a tolerance of $\pm 3^{\circ}\text{C}$). The material must be removed from its packaging for 24 hours before application.

Apply cork wall covering using **Ultrabond Eco 310** (see section **B.2.4.1**).

Spread the adhesive on the wall using a notched trowel. Then apply the covering material within the open time of the adhesive. Smooth the surface of the wall covering with a brush or wooden trowel applying light pressure immediately after application, starting from the centre and working towards the edges, to make sure full adhesive contact and to remove all air bubbles.

B.2 APPLICATION OF WALL COVERINGS

B.2.4.1 Applying cork wall coverings

Supply and application of cork wall covering after preparing surfaces with a natural-finish skimming layer or by sanding, using rapid-setting adhesive in water dispersion (such as **Ultrabond Eco 310** produced by MAPEI S.p.A.).

The adhesive used to apply the dressing must have the following characteristics:

Density (g/cm ³):	1.25
Waiting time:	0-20 minutes
Open time:	30-40 minutes
Set to foot traffic:	3-4 hours

The following are included and calculated in the price for work completed according to specification:

- preparation of the application surface;
 - cutting and trimming to size;
 - scaffolding, tools and distribution of materials to where required;
 - cleaning the material applied, removal of waste material upon completion of work, separate collection of waste material, transport and delivery of waste material to an authorised waste disposal tip and waste disposal charges;
 - all other activities required to consign work completed according to specifications.
- *per square metre*(€/m²)

