

DKS system Dekton® 8 mm on ETICS/EIFS

COSENTINO® FAÇADES
DKS SYSTEM. ADHERED ON ETICS/EIFS SYSTEM

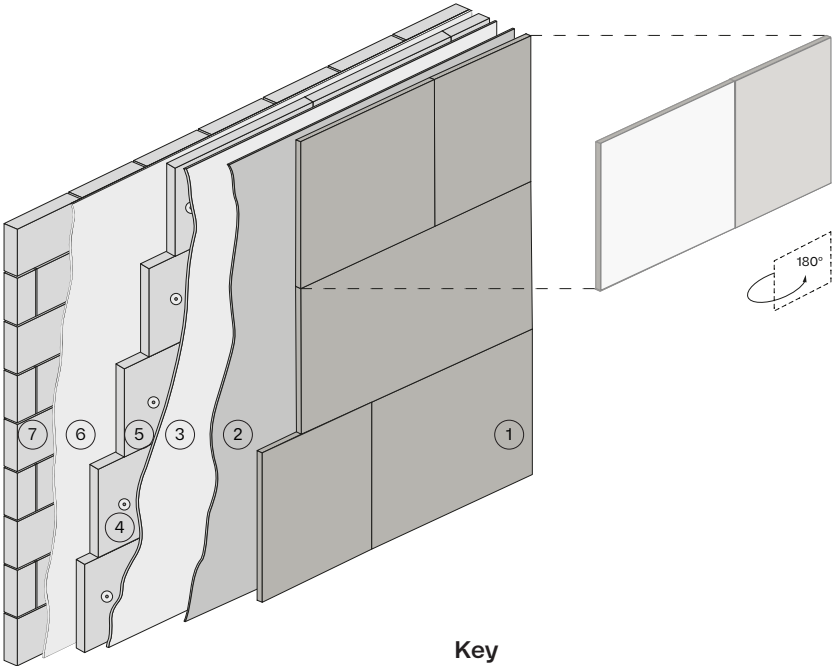


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Scope & objective

Define the limits of use of Dekton® 8 mm with ETICS(EIFS) systems.



Key

1	Dekton® 8 mm tile
2	Cement-based adhesive
3	Finishing mortar with reinforcing mesh
4	Mechanical fixing
5	Thermal insulation
6	Bonding mortar
7	Supporting wall

Limits on use

For cladding Dekton® onto ETICS/EIFS, it is essential to use complete systems supplied and guaranteed by the ETICS/EIFS provider. They will indicate the main characteristics that the cladding must meet.

Maximum format

The ETICS/EIFS provider indicates, in their certificates or technical documentation, the maximum possible formats for the cladding. As an indicative guide, below are some of the formats from reference manufacturers:

Reference	Maximum surface	Longer side	Length-width ratio	Example
Mapetherm Tile System	1.00 m ²	1,500 mm	< 3	710 x 1,420 mm
Propam Aister Ceram	0.36 m ²	900 mm	-	900 x 400 mm
Baumit Ceramic System EPS	0.36 m ²	600 mm	-	600 x 600 mm
Webertherm Ceramic Plus	0.24 m ²	600 mm	< 3	600 x 400 mm
Traditerm Ceramic	0.09 m ²	300 mm	< 3	300 x 300 mm
Stotherm Vario Ceramic	0.09 m ²	-	-	300 x 300 mm

These maximum formats are indicative and based on public documentation from each manufacturer. This information should be verified at the beginning of the study of each project to see if there are any specific modification or adaptation to the project conditions.

Available colours

Depending on the type of insulation and system characteristics, the provider may indicate a minimum reflection index of the cladding material to limit the use of dark colours.

Joints

The provider of the ETICS/EIFS system will also be the supplier of the cement-based adhesive and the grouting material, and will indicate the dimension and width of the tile-to-tile joints, expansion joints, perimeter movement joints, and structural movement joints in accordance with the applicable regulations.

Mechanical safety fixing

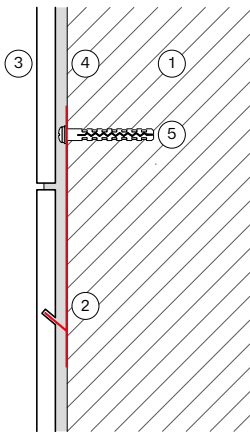
For the cladding of Dekton® on ETICS(EIFS), it may be necessary, in accordance with the applicable regulations, to use a mechanical safety fixing.

It will be the responsibility of the Technical Project Management to indicate its use.

In case these fixings are necessary, for Dekton® 8 mm, visible fixings can be used by means of a clamps or hidden by means of fixings with back grooving (Raimondi type) in the Dekton® tile.

The number and quantity of them shall be indicated by the fixings supplier.

For its fixing to the support, follow the instructions of the supplier of the ETICS(EIFS) system.



Key

1	ETICS(EIFS) system
2	Punctual security fixing clamp
3	Dekton® 8 mm tile*
4	Cement-based adhesive
5	Fixing system**

→ (*) Consult the specific technical documentation for the execution of punctual back grooving on Dekton®.

→ (**) Consult the supplier of the ETICS(EIFS) system.

→ Cross section detail of the hidden safety fixing.

Dekton® 8 mm installation

The installation of Dekton® on ETICS/EIFS system should be carried out according to the supplier's instructions, taking into account a cladding of about 21 Kg/m².

This is a reinforcement of the standard ETICS/EIFS system with plaster designed to increase its mechanical resistance to compression and traction in order to support the weight and thermal expansions generated by the cladding.

This reinforcement usually includes a greater number of mechanical fixings of the thermal insulation and reinforcement of the finishing layer of the ETICS/EIFS system through the use of stronger mesh, additional layers or the use of plasterings of greater performance.

The intervention of a technician is necessary to size the system according to the regulations concerning the thermal efficiency of the building.

The complete Dekton® solution on ETICS/EIFS system must be validated by the supplier according to the specific conditions of the construction site. They shall be complete and guaranteed systems including the adhesive for Dekton® 8 mm cladding, which shall be at least C2S1 type (according to EN 12004) for tiles under 700 mm length and C2S2 type (according to EN 12004) for greater tiles.

The installation of Dekton® 8 mm on ETICS/EIFS system will be carried out bearing in mind the conditions of the constructions site and the characteristics of the adhesive: open time, lifetime, maximum application thickness, etc.

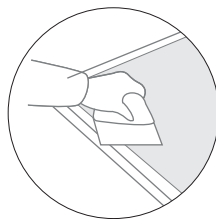
Installation should be carried out in accordance with the following recommendations:

1. Double gluing

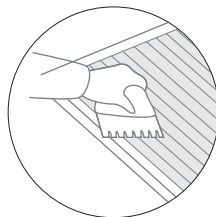
Installation is carried out according to the technique of double gluing (adhesive on the tile and on the substrate), which ensures perfect adherence and prevents gaps from forming.

The adhesive is first spread on the substrate with the smooth side of the trowel, then combed with the toothed side, parallel to the short side of the tile.

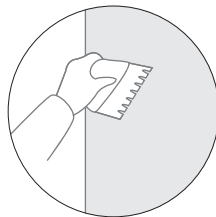
Never apply the adhesive by 'sticking' or 'pinching'.



→ Application with trowel on the tile.



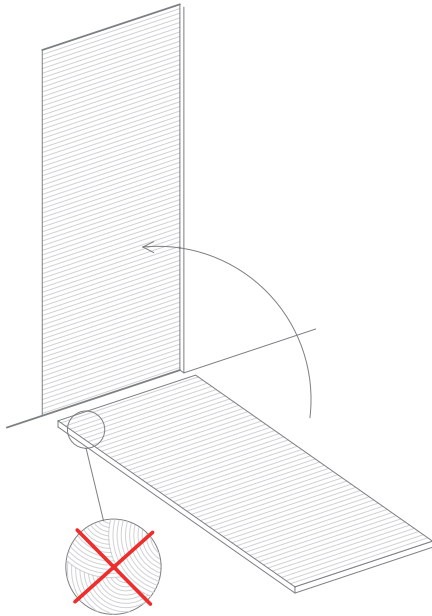
→ Application with toothed trowel on the tile.



→ Application with toothed trowel on the wall.

2. Toothed trowel

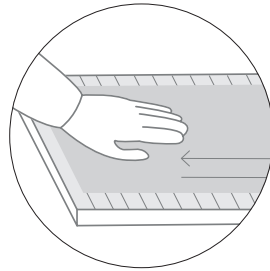
Apply the adhesive using a toothed trowel of 8 x 8 on both the substrate and the tile. Apply in parallel lines to the short side of the Dekton® tile.



3. Sliding movement

In order to facilitate the release of air and better contact between tile and substrate, whenever possible make a reversible sliding movement:

- Place the tile in its final position.
- Move it perpendicular to the adhesive lines in proportion to the width of the trowel tooth.
- Finally, put it back in its final position, respecting the width of the joint.



In any case, it is advisable to flatten the tile to facilitate air release and ensure adhesion between the different parts (Dekton® - Adhesive - Substrate).

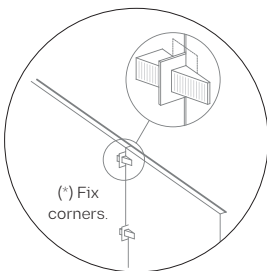
4. Use of spacers

The use of spacers and micro-bevelled edges (at least 1 mm) are recommended in order to comply with the stipulated joint width.



5. Auxiliary systems

The use of auxiliary systems to improve the final levelling of the cladding is recommended, such as levelling wedges, ensuring regular thickness of the adhesive layer of at least 3 mm.



6. Grouting material

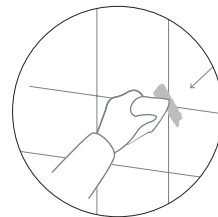
Use an appropriate grout for joints and apply according to the instructions of the manufacturer.

It is recommended to apply the adhesive in the joint to allow sufficient mortar to penetrate.

It is advisable to use a rubber trowel of the appropriate hardness to the width of the joint to spread the material diagonally to the direction of the joints.



The final texture and curvature will be set on the joint using a pointing trowel or equivalent tool.



In some cases, flexible stainless steel spatulas or extrusion guns can be used to apply the grout.

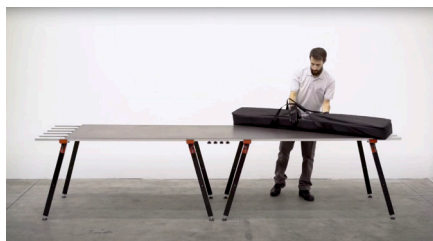
The cleaning process should start when the grout loses its sheen, early in the setting process.

Application, cutting & handling tools

Cosentino® can supply the material cut-to-size for the project or it can be cut on site with the recommended tools and accessories.

Dekton® 8 mm is easy to cut on site with any dry cutting system for large format tiles available on the market.

This requires a suitable cutting table and dry cutting tool and the use of polishing blocks to micro-bevel the edge and remove all burrs from the cut.



→ Suitable cutting table.



→ Dry cutting system tools.

It can also be cut with a circular saw fitted with the recommended blade, always with water supply.

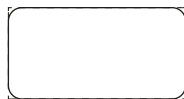
In general, L-shaped or U-shaped cuts are not recommended, especially when the thinness of any of the resulting arms may lead to breakage.

To create recesses and corner joints, it is recommended to pre-drill a hole with a radius of at least 5 mm for edge smoothing and subsequent cutting with the recommended cutting system.

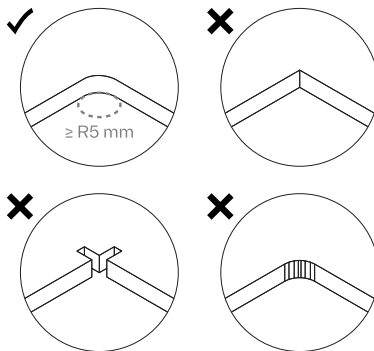
1°.



2°.






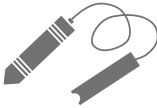




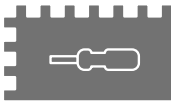







→ Drilled holes in corners + Straight cut.



→ Good practices for making the recesses.

Common tools for the
installation of Dekton® 8 mm

			
→ Workbench.	→ Tape measure.	→ Dry cutting machine.	→ Approved drill and drill bits.
			
→ Polishing block.	→ Levelling system.	→ Spirit level.	→ Mixer.
			
→ Plastic trug.	→ Mixing trowel.	→ Toothed trowel.	→ Finishing trowel.
			
→ Suction cups.	→ Levelling kit.	→ Grouting kit.	→ Cleaning sponge.

Cleaning & maintenance

After the installation of Dekton®, the surface usually has residues such as small traces of cement, limescale, silicone, epoxy, etc.

It is therefore necessary to do a final clean that will leave the Dekton® surface clean without damaging the grout.

There are specific products on the market containing acidic solutions to remove cement, epoxy, etc. It is advisable to use the recommended cleaning products and apply them according to the recommendations of the manufacturer.

For maintenance, wet cleaning with a neutral detergent with a high cleaning power is recommended, avoiding the use of acid and abrasive products.

For further details, see the *Dekton® Façades Cleaning & Maintenance* manual.

Note for Architectural Support

This note is joint and severally supplied together with the preliminary study or specific documentation issued to the architects for their project at design stage. For future deliverables during design stage, this note will be understood as delivered and accepted by the architects and will also be valid for any of the deliverables that would be sent to the architects during that stage.

The drawings supplied by Cosentino®, if any, have been drawn up based on information received by Cosentino® and sent by the designer. Cosentino® is not responsible for the accuracy and scope of the information received, whether in dimensions, orientation, height, or others. The plans are not drawn for installation; their objective is to give indications to the designer about the application of Dekton® on the façade during the development of the project.

The calculations supplied by Cosentino®, if any, have been prepared based on the information received by Cosentino® and sent by the designer. Cosentino® is not responsible for the accuracy and scope of the information received, whether in dimensions, orientation, height, or others. Calculations are not made for installation; their objective is to give indications and limitations to the designer on the application of Dekton® on the façade during the development of the project.

For the impact resistance of a façade cladding, please refer to the European approved document 'Kits for external wall claddings mechanically fixed'. Dekton® surfaces on façades have an impact resistance that varies according to their thickness and their family. This information is included in section 3.5 of the ETA 14-0413 dated 18.01.2022, issued by Dekton®. The panels have been subjected to a series of hard body and soft body impacts at different energy levels.

The results classify Dekton® in the impact category IV for thicknesses of 12 mm or 20 mm. Category IV: The degree of exposure to use must be an area out of reach from ground level. The responsibility for the decision of the built solution of the façade to be adopted in the specific project falls on the designer.

The façade study carried out by Cosentino® Technical Team, in accordance with the instructions received, has focused on what was requested, which can be one of these four options: a) Dekton® panels without reference to their fixing system; b) Dekton® panels for adhered attachment to a continuous surface; c) Dekton® panels excluding fastening substructure; or d) Dekton® panels including a fastening substructure.

The façade study carried out by Cosentino® Technical Team is complemented by the following documents, which are an inseparable part of the study:

→ [ETA 14-0413 certification, dated 18.01.2022, for ventilated \(not adhered\) façades.](#)

→ [Dekton® Environmental Product Declaration.](#)

→ [Technical Manual of Dekton® Façades.](#)

→ [Cleaning and Maintenance requirements for Dekton® Façades.](#)

→ [25-year Dekton® Façades Warranty.](#)

→ [Conditions of Provision of Services \(CPS\) and Technical Conditions of Façades \(TCF\).](#)

We recommend that the designer consult the Cosentino® *Manuals, Certificates and Tests* for Dekton® façades, accessible on the web <https://www.cosentino.com/professional/technical-documentation/>, and on <https://www.cosentino.com/facades/#digital-resources>, and or under request to Cosentino® Façades Technical Department.

Note for Sales Offer

We understand that the Dekton® material as requested is for a façade, which may (or may not) have been previously studied by Cosentino® Technical Team for the architects. Cosentino® assumes that the final definition of the façade system in terms of sizing, components and layout maintains the recommendations of our technical team (if applicable), and that a façade project has been carried out by a competent technician, complying with applicable building codes and regulations.

We recommend confirming with the architects that the façade to be executed complies with the building regulations and the *Dekton® Technical Façade Manual*. This *Manual* can be downloaded through the link <https://www.cosentino.com/professional/technical-documentation/>, and <https://www.cosentino.com/facades/#digital-resources>, and/or under request to Cosentino® *Façades Technical Department*.

The Dekton® material for façade covered by this offer shall be used in accordance with the following documents, which form an inseparable part of the offer:

- [ETA 14-0413 certification, dated 18.01.2022, for ventilated \(not adhered\) façades.](#)
- [Dekton® Environmental Product Declaration.](#)
- [Technical Manual of Dekton® Façades.](#)
- [Cleaning and Maintenance requirements for Dekton® Façades.](#)
- [25-year Dekton® Façades Warranty.](#)
- [Conditions of Provision of Services \(CPS\) and Technical Conditions of Façades \(TCF\).](#)

Health & safety

Risks associated with handling and transport

Operators and fitters dealing with Dekton® materials, must comply with all applicable occupational health and safety laws and regulations.

During transport and handling of Dekton® materials, risks such as bumps, cuts, musculoskeletal disorders, entrapment or blast injuries can occur due to incorrect handling.

Always take the necessary occupational safety measures to meet the requirements of local regulations. This *Manual* is not an exhaustive document or a substitute for the relevant laws and regulations, and is provided for information purposes only. Safety measures will depend on the specific conditions of each job.

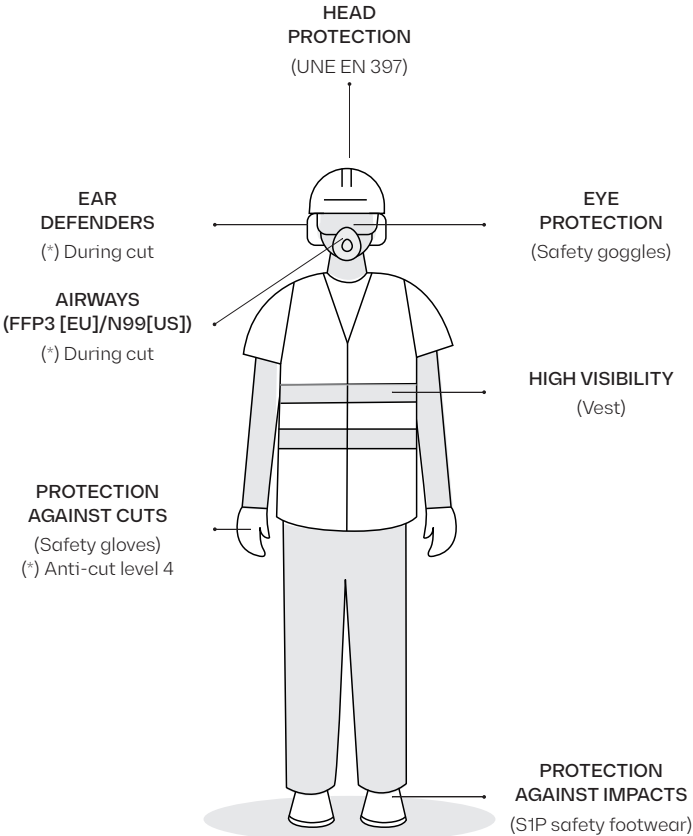
Please also refer to product *Safety Data Sheets* and *Good Practice Guidelines* which are available on the website osh.cosentino.com, or request such documents from the distributor or manufacturer.

Risks associated with manufacturing and transformation

The manufacturing process can involve risks such as cuts, blast injuries, entrapment, exposure to high noise levels and exposure to chemicals such as free crystalline silica dust.

For more information about these risks and measures to prevent them, please refer to the *Safety Data Sheets* as well as the *Good Practice Guidelines* that Cosentino® has published.

If you do not have this information, please ask your supplier.



The instructions contained in this document and related advice are for information purposes only and may not reflect all situations encountered in a project. Before starting a construction project, all Dekton® installation areas will be checked in accordance with this *Manual*, regulations, good construction installation practices and supplier instructions.

Cosentino® may not be held responsible for the material supplied if it has not been installed according to the guidelines in this *Manual*. For any questions or further details, please visit the website www.cosentino.com or consult your local Cosentino® contact person.

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