

GUIDE

FOR PROFESSIONALS

FASTENERS & SCREWS



ESSEVE

GET IT DONE

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**Some of these services may not be available in your region.*

INSTALLATION OF DRYWALL

SCREWS
REQUIRED
APPROX.
20/M²

For wood studs, OSB, and plywood



Ph2

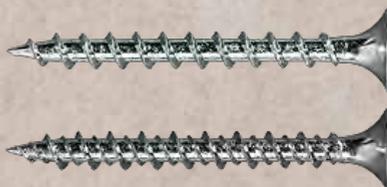
DRYWALL SCREWS

- Labelled wood studs or combi-screws [wood/steel].
- Available as loose, collated and coil collated.



SCREW LENGTH

- Single drywall about 30 mm
- Double drywall about 40 mm
- Triple drywall about 55 mm



For steel studs, max 0.9 mm



Ph2

DRYWALL SCREWS

- Labelled steel studs or combi-screws [wood/steel].
- Speed: 25–50 mm 2800–6000/min.
51–75 mm 2000–2800/min.



SCREW LENGTH

- Single drywall about 25 mm
- Double drywall about 40 mm
- Triple drywall about 50 mm



TIP! Use a screwdriver with depth stop for efficient installation.

For reinforcement steel studs



Ph2

DRYWALL SCREWS

- Labelled Drywall screw with drillpoint for steel studs.

Drill capacity: 0.7– 2.0 mm



For gluing drywall



Ph2

DRYWALL SCREW DRYWALL

- For the installation of double layer drywall.
- The first layer is installed with traditional drywall screws, then the second layer of drywall is glued and secured with the drywall screw Drywall.

Speed: 800 – 1400 RPM Length: 38 mm.



For wood/steel studs outdoor



Ph2

DRYWALL SCREW GU

- For installation of drywall outdoors on outer walls against wood- or steel studs.
- The flat head produces a weatherproof installation and facilitates the installation of the facade lining.
- Available as both loose and collated.



ALSO
AVAILABLE
WITH
DRILLPOINT

For hard drywall and steel studs



Ph2

HARD DRYWALL SCREW

- For installation of hard and robust drywall boards.
- Special thread pushes the board material against the substrate.
- Available as both loose and collated.
- Also available coil collated.



SCREW
LENGTH

Drywall thickness + 20 mm into the wooden joist
Drywall thickness + 10 mm into the steel joist



SCREWS
REQUIRED
APPROX.
20/M²

INSTALLATION OF **CHIPBOARD**

For wood studs



Ph2

CHIPBOARD SCREW WITH SHARP POINT & COARSE THREAD

- For the installation of chipboards and mouldings and base boards against wood studs.

Length: 30–75 mm.



For reinforced studs, max 2.0 mm



Ph2

CHIPBOARD SCREW WITH DRILLPOINT

- For the installation of chipboards and mouldings and base boards against steel studs.

Length: 42 mm and 55 mm.



Screws should be countersunk 2 mm on floor chipboard so in time they do not protrude from the surface. Do not fill the holes.

IMPORTANT!

These boards are classified as **hard**. A screw with **milling ribs** is necessary so that it can countersink itself.

INSTALLATION OF

**OSB, BOARD
& PLYWOOD**

For wood- and steel studs,
max 0.9 mm



Ph2

BOARD SCREW

- For the installation of Minerit and boards, as well as mouldings and base board.

Speed: 2000–2800 r/min.

Length: 28 mm, 42 mm, 55 mm.

**SCREW
LENGTH**

Wood studs: Board thickness + 20 mm = right screw length

Steel studs: Board thickness + 10 mm = right screw length

**SPECIAL INSTALLATION**

For installation on e.g. a concrete wall, the boards can usually be secured with a good result using mounting adhesive.

TIP! Choose collated screws for quick installation.

Use suspended ceiling screws for installation of suspended ceiling strips against wood/board material.

INSTALLATION OF PVC-ROOFING

For wood studs



HEXAGON

ROOFING SCREW WITH WINGS

- Self drilling and tapping.
- Galvanized steel washer with EPDM seal.
- Bright zinc plated surface treatment.
- Silver polyester powder coated finish.

Dimensions: 4.8x35 mm.

C3



Do not overtighten the screw during installation as this can damage the EPDM-seal, jeopardising the requirement of a weatherproof installation.

INSTALLATION OF SHEET METAL ROOFING



FOR AN AESTHETIC
RESULT, USE: ROOFING
SCREW DECOR.



For wood studs



ROOFING SCREW WITH DRILLPOINT

- For the installation of profiled sheet-metal.
- Galvanized steel washer with EPDM seal.
- Equipped with hex head.

Dimensions: 4.8x20, 4.8x35, 4.8x60 mm.

C3



Available in the colours:



CHOOSE THE RIGHT ROOFING SCREW!

Profiled sheet-metal: Painted or stainless steel screw and washer.
Aluminium sheet-metal: Aluminium screw.



INSTALLATION OF GUTTERS

For wood applications



TX20

DRAIN HOOK SCREW

- Fibercut tip facilitates drive-in and minimises splitting.
- Installed with low torque directly in the pre-punched hole on the drain hook.

Dimensions: 4.8 x 25 mm + 4.8 x 35 mm.



Stainless
A2



Available in the colours white, black silver and stainless steel.

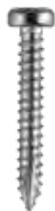
INSTALLATION OF

WINDOW SILLS & WEATHERBOARDS

For wood applications



SQUARE



WINDOW SILL SCREW

- The screw seals against the plate.
 - Fibercut tip facilitates drive-in and minimises splitting.
 - When installed the window sill flashing must be pre-drilled.
- Dimensions: 3.5 x 25 mm.

Stainless
A2



Available in the colours white, black and stainless steel.

For wood applications



TX20

WEATHERBOARD SCREW

- For installation of weatherboards, barge board flashing in substrates against wood or sheet-metal against sheet-metal.
 - Drill capacity in steel: 2 x 1.25 mm.
- Dimensions: 4.2 x 25 mm

Stainless
A2



Available in the colours white, black, brick red, silver and grey.

WOOD SCREW INDOORS

Partially threaded with pan head
or countersunk head



- Made of hardened steel, bright zinc plated.
- Two fibercuts give a very low drive-in torque in harder materials and minimises splitting.
- Head with six cutting grooves countersink the head, leaving a smooth surface without splinters.

Speed: 400–1200/min.

Dimensions: 3.0 x 12 mm – 6.0 x 150 mm.

C1





**PERFECT
FOR
FITTINGS**

Fully threaded with pan head or countersunk head



TX

- Made of hardened carbon steel, bright zinc plated.
- Fibercut in the point gives a low drive-in torque and minimises splitting.
- The underside of the head is smooth, which means it is ideal to secure hinges without damaging the material.

Speed: 400–1200/min.

Dimensions: 3.0 x 12 mm – 6.0 x 90 mm.

C1





WOOD SCREW OUTDOORS

Partially threaded with
countersunk head



TX

CORSEAL TREATED

- Made of hardened steel.
- Two fibercuts give a very low drive-in torque in harder materials and minimises splitting.
- Head with six cutting grooves countersink the head, leaving a smooth surface without splinters.

Speed: 400–1200/min.

Dimensions: 4.0 x 30 mm – 8.0 x 300 mm.

C4



TIP! There is an additional fibercut directly after the usual wood thread to facilitate the installation of thick screws longer than 160 mm.

Provides solid protection against rust. Read more on page 26.

Partially threaded with pan head or countersunk head



STAINLESS A2 CORROSION CATEGORY C4



- Made of unhardened stainless steel.
- Two fibercuts give a very low drive-in torque in harder materials and minimises splitting.
- Head with six cutting grooves countersink the head, leaving a smooth surface without splinters.

Speed: 400–1200/min.

Dimensions: 3.0 x 16 mm – 6.0 x 140 mm.



**USED FOR
COASTAL
INSTALLATION**

Partially threaded with countersunk head



STAINLESS ACID PROOF CORROSION CATEGORY C5



- Made of unhardened acid proof steel.
- Fibercut in the point means a very low drive-in torque in harder materials and minimises splitting.
- Head with six cutting grooves countersink the head, leaving a smooth surface without splinters.

Speed: 400–1200/min.

Dimensions: 5.0 x 50 mm – 6.0 x 120 mm.



Read more about stainless on page 26.



INSTALLATION OF

MOULDINGS & BASE BOARDS

For wood- and steel studs, 0.9 mm



TX10

MOULDING/BASE SCREW

- Fibercut at the point minimises the risk of splitting and facilitates installation.
- The small head gives an attractive result.

Speed: 400–1200/min.

Dimensions: 3.9 x 42 and 3.9 x 55 mm,
stainless is also available in 70 mm.



C4

TIP!

There are stainless moulding/base board/floor screws available for outdoor use.

INSTALLATION OF SOLID WOODEN FLOORING



For wooden substrate



FLOORING SCREW

- Screwed 45° in the tongue.
- Counter-thread presses the floor against the substrate.
- Self-drilling tip drills through the floor, which reduces the risk of splitting.

Speed: 400–1200/min.



FLOOR THICKNESS

MINIMUM SCREW LENGTH

14 mm 42 mm

20 mm 58 mm

25 mm 58 mm

30 mm 58 mm

**SQUARE BITS
INCLUDED**



Overtightening may compromise screw strength.

INSTALLATION OF

CONSTRUCTION TIMBER & GLULAM

FOR
CONCEALED
JOINING OF TIMBER
STRUCTURES

For wood



TX

CONSTRUCTION SCREW ET-T

- Gives concealed joining of construction timber.
- For heavy-duty timber structures.
- Aesthetic, non-visible result.
- Unique thread pitch draws together the timber.
- Gives high strength values

Dimensions:

6.5 x 65 mm – 8.2 x 330 mm.

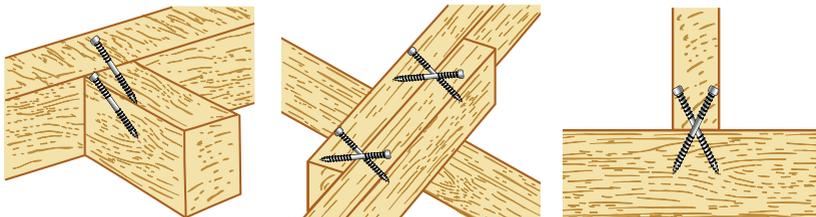
C4

AREA OF APPLICATION

- Roof trusses, purlins, roof components
- Outer and inner walls
- Floor structures and splicing of joists
- Primary and secondary joists
- Facades
- Studs and ground plates
- Support blocks



**A BETTER AND
STRONGER OPTION
THAN TRADITIONAL
WOOD SCREWS.**



FOR FASTENING FLOOR JOINTS TO BINDERS

Tighten the screw at an approximate 45-degree angle downward from the outside binder towards the floor joint. Use ESSVE's specific system bits for a safe installation. Fit the system bits without a bit adapter directly in the chuck. Consequently, screw installation must take place at a constant torque without stopping.



INSTALLATION OF **BRACKETS & FITTINGS**

For wood applications



TX20

WOOD CONNECTOR SCREW

- Install perpendicular to the fitting.
- Activate the torque clutch on the power driver to avoid overtightening.

Dimensions: 5.0 x 40 mm.



C4



Stainless A4 anchor nails are recommended for marine environments.

INSTALLATION OF
45–50 MM
 THICK SILLS/
 TEDGER BOARDS

INSTALLATION OF **SILL/TEDGER BOARD**

For concrete, solid brick, hollow
 block & hollow brick



GROUND PLATE SCREW

C2

- Effectively presses the timber against the concrete.
- Countersunk heads permit free placement of balusters/floor joists.
- Drive-in the screw in the predrilled hole without a plug.

Dimensions: 7.5x92 mm.

CORROSION CATEGORY C2: Surface treatment 12 µm conforms with the demands set out in building regulations regarding installation in unheated areas under a roof.



INSTALLATION OF JOISTS & POSTS



For wood applications



FRENCH WOOD SCREW

- For installations that require a heavy-duty screw.
- Pre-drill the timber in a suitable dimension.
- Hex head.

Dimensions: 6.0 x 30 – 12 x 240 mm.



C3

THE STRONGEST
WOOD SCREW
FOR OUTDOOR USE

For wood applications



HEXAGON

WOOD SCREW HEX

- The strongest wood screw.
- Reduces the risk of splitting when driving in.
- HEX-drive for maximum grip.

Dimensions: 6.5 x 45 – 10 x 150 mm.



NO
PREDRILLING
REQUIRED.

C4

TIP! Better alternative than the French wood screw.

For wood applications



TX

WOOD SCREW WAF CORRSEAL

- Flat and round head gives a low overall height and aesthetic final result.
- Designed for perfect installation in joist and post bases.
- Fibercut at the point minimises the risk of splitting.

Dimensions: 6.0 x 40 – 10 x 240 mm.



NO
PREDRILLING
REQUIRED.

C4

INSTALLATION OF DECKING

CHOOSE THE SCREW QUALITY

Good – Corrseal

C4
HARDENED CARBON STEEL, CORROSION CATEGORY C4

- Inland climate
- Stable low structures



Better – Stainless A2

**Stainless
A2**
UNHARDENED STEEL, CORROSION CATEGORY C4

- Shoreside & tough climates
(lakes/brackish water)
- Raised decking, handrails & stairs



Best – Stainless A4

**Stainless
A4**
UNHARDENED STEEL, ACID PROOF, CORROSION CATEGORY C5

- Coastal and tough climates (salt water)
- Pool decking & coastal locations
- Exclusive wood materials



CHOOSE THE SCREW DESIGN

Classic

- Traditional design
- Bestseller



Torpedo MAX III

- 40% stronger than CLASSIC
- Test winner



HDS System screw

- Hidden decking system (HDS) for the most visually appealing decking result
- For concealed installation in all environments
- Only used together with the installation tool and special bits.

NEW





SELECT THE RIGHT

RUST PROTECTION

C1**Zinc plated 5 μm , phosphated,
corrosivity category C1**

For environments with *very low* corrosivity, for example, indoors in heated buildings.

C2**Zinc plated 12 μm , corrosivity category C2**

Indoors in areas that are not heated and with fluctuating temperatures and humidity. For environments with low frequency of moisture condensation and a low content of air pollution, for example, sport halls and warehouses.

Outdoors with a low content of air pollution, for example, rural areas.

C3**Hot dip galvanized, corrosivity category C3**

Indoors in areas with moderate humidity and a specific degree of air pollution from production processes, for example, breweries, dairies and laundries.

Outdoors where specific amounts of salt or moderate amounts of air pollution are found, for example, urban environments, light industrialised areas and environments affected by nearby coast.

C4**Anti-corrosion treatment, corrosivity category C4**

Indoors in areas with high humidity and large amounts of air pollution from production processes, for example, chemical industries, swimming baths and shipyards.

Outdoors with moderate amounts of salt or tangible amounts of air pollution, for example, industrial and coastal areas.

Stainless**A2****Stainless steel, corrosion category C4**

See the application area under C4 above, except for swimming baths.

Stainless**A4****Stainless acid proof steel, corrosion category C5**

Indoors in areas with virtually permanent moisture condensation and a large amounts of air pollutants.

Outdoors in areas with large amounts of salt in the air.

TIP! For regulatory requirements on corrosion protection, see applicable European and local building regulations.



*Research Institutes of Sweden



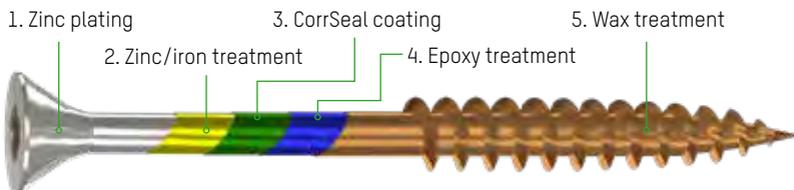
C4

CORRSEAL

For designs exposed to dampness.

- Advanced rust protection with patented characteristics.
- Supports temperature fluctuations of -35°C to $+35^{\circ}\text{C}$
- Nano processing technology for multiple layers of protection.
- Certified by RISE.

CORRSEAL TREATMENT OCCURS IN 5 STEPS:



Once a year RISE checks the performance of CorrSeal and every fifth year the Type approval is updated and more comprehensive testing is conducted.

SUPERIOR ADHESION CAPACITY

CorrSeal has superior adhesion, which is crucial in order to provide good corrosion protection. For the installation of exposed screws in joists for high friction and where a surface treatment is demanded that is flexible and which has good adhesion capacity. Some surface treatments have such poor adhesion that a full 50 % loosens due to friction.

CorrSeal is available in the colours silver and brown/gold and the choice of colour is linked to the type of installation.



STAINLESS

Gives the highest possible lifespan.

- Withstands red-rust even in environments that are classified as aggressive.
- Supports movement in structures and timber that twists thanks to more flexible steel.
- Supports all temperatures.

ENVIRONMENTS WHERE STAINLESS STEEL IS ALWAYS RECOMMENDED

Surroundings and environments with a high content of salt and moisture are classified as aggressive, which means that red-rust occurs quicker. Screws and fastening in stainless A2 or A4 withstands corrosion better than surface treated screws and should always be used where a great deal of moisture occurs and for pool decking. If the screws come into contact with detergent or thawing salt, it is also important to choose a stainless option, as it is not affected as severely by chemicals and corrosive substances. Fasteners of A4 withstand more harsh environments than A2 and are recommended for e.g. installations close to coastal areas.

WITHSTAND MOVEMENT IN STRUCTURES

Structures or materials that have large torsional forces, movement and expansion require screws and fasteners of stainless steel, as these are softer and more pliable. Surface treated, hardened screws find it harder to withstand the forces that arise in the event of movement and the risk for steel failure is significantly greater.

INSTALLATION IN DRYWALL

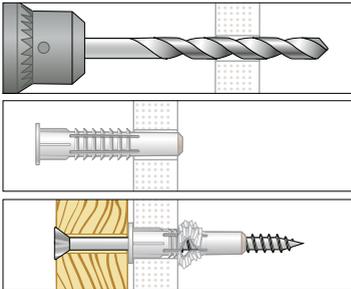
Shear and tension load specifications define how heavy installation the fastener supports.

Light loads



SCREWS WITH PLUGS

- All round option for all types of installation.



Drill with the diameter indicated on the plug packaging. Insert the plug and then mount the item of choice with the screw.

Single
drywall

TENSION LOAD
← 20 KG

KG ↓ SHEAR LOAD
25 KG

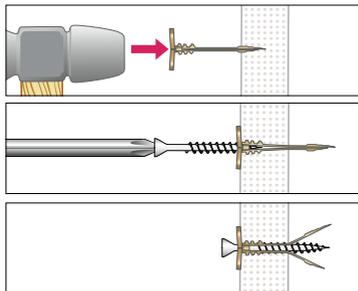
Light loads

**GIVES MINIMAL
MARKS ON THE WALL
DURING REMOVAL**



DRYWALL ANCHOR, ARROW ANCHOR

- For quick and easy hanging in drywall.
- Used together with drywall screw diameters 3.5–3.9 mm.
- Perfect for hanging, e.g. paintings.



Knock in the anchor with a hammer and screw in a drywall screw to expand the anchor.



**NO
PREDRILLING
REQUIRED.**

Single
drywall



TENSION LOAD
← 10 KG



SHEAR LOAD
↓ 20 KG

Double
drywall



TENSION LOAD
← 15 KG



SHEAR LOAD
↓ 30 KG

Light loads

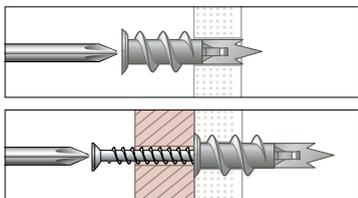


PZ2

DRYWALL ANCHOR, DRIVA TF27

- Easily installed with a screwdriver.
- Screw with countersunk head included.
- Max. part thickness 27 mm.

Screw length: 4.5x50 mm.



Screw the self-drilling fixing directly into the wall. Place the item you want to hang in front of the bracket and just screw in the screw using a screwdriver.



**NO
PREDRILLING
REQUIRED.**

Single
drywall



TENSION LOAD
← 10 KG



SHEAR LOAD
↓ 20 KG

Double
drywall



TENSION LOAD
← 15 KG



SHEAR LOAD
↓ 30 KG

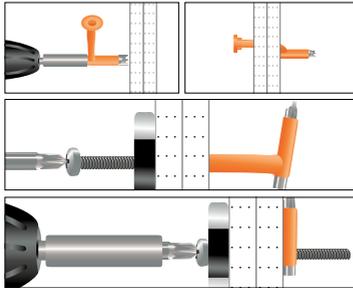
Heavy loads



Ph2

DRYWALL ANCHOR, DUCK FOOT

- Requires no special tools.
- Easy to install.
- Perfect for hanging up rails, brackets, wall cabinets, TV mounts, lamps, etc.



Connect the head to your bit holder and drill the anchor directly into the wall. Drilling is finished when the plastic leg touches the wall. Bend down the leg and push Duck Foot into the hole. Push in the screw and screw up the item you wish to hang. Tighten the screw until it stops. The plastic tube expands in the drilled hole and the anchor part moves into place.

**WORKS IN
BOTH SINGLE AND
DOUBLE DRYWALL**

**PATENTED DRYWALL
FASTENER**



Single
drywall



TENSION LOAD
← 25 KG



SHEAR LOAD
↓ 40 KG

Double
drywall



TENSION LOAD
← 40 KG



SHEAR LOAD
↓ 50 KG



For several fixing points spacing should be at least 200 mm to attain the specified bearing capacity.



ALSO CALLED
**MOLLY
BOLT**

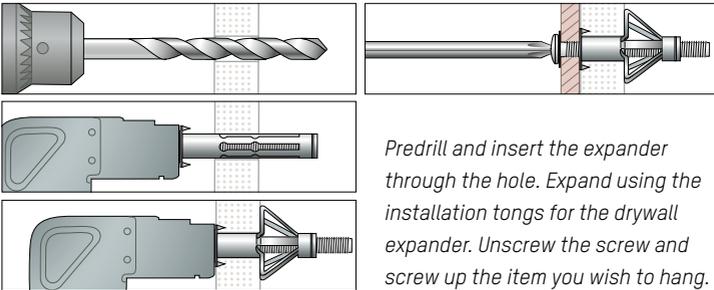
Heavy loads



Ph2

DRYWALL EXPANDER SAM 5E & 5D

- Sam 5E for installation on single drywall.
- Sam 5D for installation on double drywall.
- The Sammy installation tool is recommended for correct expansion.



Pre-drill and insert the expander through the hole. Expand using the installation tongs for the drywall expander. Unscrew the screw and screw up the item you wish to hang.

Single drywall

TENSION LOAD ← 25 KG

KG ↓ SHEAR LOAD 40 KG

Double drywall

TENSION LOAD ← 40 KG

KG ↓ SHEAR LOAD 60 KG



For several fixing points spacing should be at least 200 mm to attain the specified bearing capacity.



**INSTALL
WITHOUT
PLUGS**

INSTALLATION OF

LIGHTWEIGHT CONCRETE

The need to drill and plug, before screw fastening, is a common task that takes a great deal of time. Using a lightweight concrete screw you can screw directly in lightweight concrete. This produces a safe installation with excellent load value. For those occasions when a screw other than the lightweight concrete screw needs to be fitted, we recommend plugs are used, see page 48. Important! The insertion depth in the material affects the pull-out value.



We recommend that you perform a pull-out test for larger objects and where you need to use the load capacity of the lightweight concrete screw to the full. Read more about Pull-out testing under Services on page 55.

Heavy loads

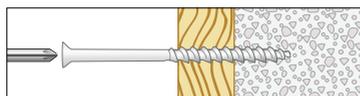


TX30



LIGHTWEIGHT CONCRETE SCREW STANDARD

- Designed for porous material
 - Available with countersunk, pan or wafer heads.
 - Suitable for e.g. installation of wooden or steel joists, ground plate installation and installing interior fittings.
- Length: 65 mm – 240 mm.

C4


Drive straight into lightweight concrete, but exercise care not to overtighten the screws.



LIGHTWEIGHT CONCRETE



**NO
PREDRILLING
REQUIRED.**

**LIGHTWEIGHT
CONCRETE =**
Xella®, Ytong®,
H+H®, Leca®

Heavy loads

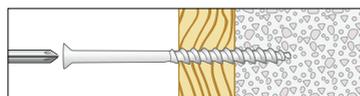


TX40



LIGHTWEIGHT CONCRETE SCREW, HEAVY LOAD

- Higher load value than lightweight concrete screw standard.
 - Ideal for the installation of awnings, roof trusses, screen roofs, binders and facade linings.
- Length: 185 – 210 mm.

C4


Screwed directly into the lightweight concrete.



LIGHTWEIGHT CONCRETE



**NO
PREDRILLING
REQUIRED.**

DID YOU KNOW!

Lightweight concrete is available in different quality groups that are designated 400, 450, 500 and 600. The figures denote the density, which reflects the strength and rigidity. Its low strength places high demands on the fasteners. Lightweight concrete is then available in two main types, light ballast concrete and gas concrete which are the most common.

INSTALLATION IN

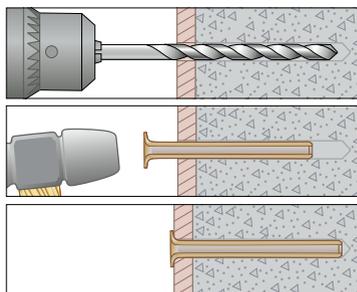
SOLID BRICK & HOLLOW BRICK

Light loads

SUITABLE FOR
INSTALLING STEEL
AND WOODEN
BATTENS

EXPANDABLE NAIL

- Perfect where a short insertion depth is required.
- For the installation of ground plates, roof irons, fixing band, pipe suspensions and nailed battens for suspended ceilings.
- Especially suitable for blind frames around windows and infill sections.



Drill with the same diameter as the nail.

Drive in the nail with a hammer. The tubular nails are clamped in position by the material attempting to return to its original form.

CONCRETE

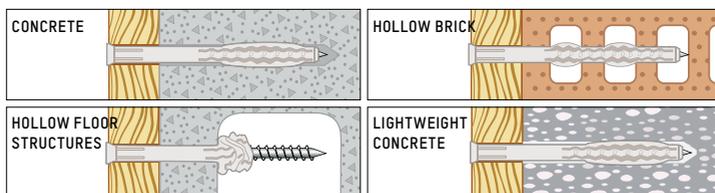
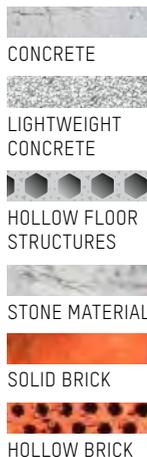
STONE MATERIAL SOLID BRICK

Heavy loads



GXL FACADE PLUG

- Screw and plug in one.
 - Available with bright zinc plated, hot dip galvanized and stainless screws.
 - Ideal for facade installation, windows, doors, kitchen fittings, wardrobes and handrails.
- Length: 100 – 240 mm.



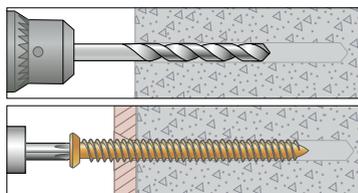
Heavy loads



CONCRETE SCREW

- For quick and strong anchoring.
 - Withstands pulsating loads.
 - Has a good load capacity.
 - Removable.
 - Good selection for fire requirements.
- Length: 30 - 192 mm.

Applications: Formwork braces, formwork anchoring, temporary bracing of prefab elements, suspension of pipes, cable trays, etc.



Pre-drill and roughly clean the drill hole by moving the drill back and forth two or three times. Installed without plugs. Should be tightened using an impact driver or impact wrench. Available with countersunk, pan head, hex head, eye, pan head with washer, etc.





INSTALLATION IN

CONCRETE & STONE MATERIAL

For safe installation in concrete and brick there are different types of fasteners, depending on whether the installation is a lighter or heavier installation.

CORRECT PLACEMENT OF FASTENINGS

In order to calculate the load carrying capability you must take the placement of the expander into consideration during installation. Above all you should be aware of the distance to the closest edge to guarantee a safe installation.

THIN WALLS OR FLOOR STRUCTURES

affect the load carrying capability and you must take into account that the reduction is affected by several edge distances.

EXPANDERS CLOSE TO EACH OTHER

require extra consideration as you must also take into account the centre distance. If the optimal centre distance is not reached the bearing capacity must be reduced.

Guide values specified for the load capacity is based on extensive test data.



**ENSURE A
DURABLE INSTALLATION
– BOOK PULL-OUT
TESTING, READ MORE
ON PAGE 55.**

LOAD CAPACITY FOR CONCRETE FASTENING

Concrete failure, adhesion failure, expander failure, edge and corner failure as well as cross-sectional failure are causes of failure that can occur with incorrect selection of fastening in concrete. Select the right concrete fastening or load capacity and type of installation, to avoid the risk of failure.

CRACKED CONCRETE affects the load carrying capability and as rule of thumb you can reduce the maximum value by half. It can however be greater.

GREATER CONCRETE QUALITY can give a higher load carrying capability than specified. Always perform exact calculations to guarantee safe installation.

CONCRETE SCREWS

Permitted load capacity up to 2.5 kN.

LIGHT LOADS:

0–5 kN, 0–500 kg

CONCRETE BOLT

Permitted load capacity up to 13 kN.

MEDIUM LOADS:

5–10 kN, 500–1000 kg

EXPANDERS

Permitted load capacity up to 25 kN.

HEAVY LOADS:

10–120 kN, 1000–12000 kg

CHEMICAL ANCHOR

Can attain a load capacity up to 120 kN.

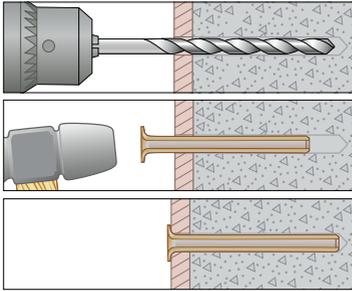
Light loads

SUITABLE FOR
INSTALLING STEEL
AND WOODEN
BATTENS



EXPANDABLE NAIL

- Perfect where a short insertion depth is required.
- For the installation of ground plates, roof irons, fixing band, pipe suspensions and nailed battens for suspended ceilings.
- Especially suitable for blind frames around windows and infill sections.



*Drill with the same diameter as the nail.
Drive in the nail with a hammer. The
tubular nails are clamped in position by
the material attempting to return to its
original form.*



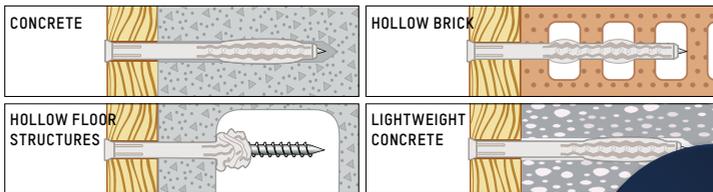
Light loads



GXL FACADE PLUG

- Screw and plug in one.
- Available w. bright zinc plated, hot dip galvanized and stainless screws.
- Ideal for facade installation, windows, doors, kitchen fittings, wardrobes and handrails.

Length: 100–240 mm.



WORKS IN ALL
MATERIALS!



Light loads

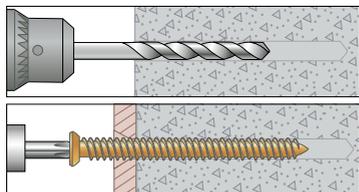


CONCRETE SCREW

- For quick and strong anchoring.
- Has a good load capacity.
- Removable.
- Good choice of product for fire requirements.

Length: 30 - 192 mm.

Applications: Formwork braces, formwork anchoring, temporary bracing of prefab elements, suspension of pipes, cable trays, etc.



Predrill and roughly clean the drill hole by moving the drill back and forth two or three times. Installed without plugs. Should be tightened using an impact driver.

Available with countersunk, pan head, hex head, eye, pan head with washer, etc.



CONCRETE



HOLLOW FLOOR
STRUCTURES



SOLID BRICK



Did you know...

A stud expander that is correctly installed can have a load carrying capability of up to 2.5 tonnes.

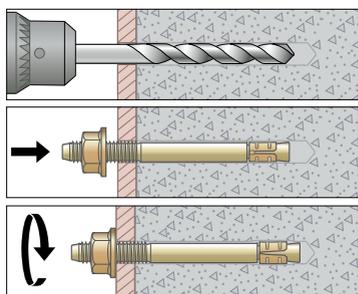
Heavy loads



GOLDEN ANCHOR® WEDGE ANCHOR

- Quickly installed.
- Safe installation.
- Choose electro zinc plated for indoor installation.
- Choose hot dip galvanized or stainless/acid proof A4 for outdoor installation.
- ETA approval.

Applications: wooden studs, ground plates, angle brackets, cable trays, wrought structures, etc.



*Drill with the same diameter as the screw.
Roughly clean the drill hole by moving the drill back and forth two or three times.
Before knocking in the expander, position the item, and tighten the nut to the correct torque.*



CONCRETE



STONE MATERIAL



See the packaging for the correct drill depth and tightening torque.

**TIP!**

Use an impact wrench with a torque capacity of 300 Nm.

Heavy loads



HEXAGON

CONCRETE BOLT

- Hex head.
 - For stable fastening in concrete.
 - For calculation in accordance with Eurocode.
- Length: 55 – 130 mm.



CONCRETE



Keep in mind that small edge and/or interrelated spacing as well as concrete quality affect the load capacity. Contact our technical support for more information.



INSTALLATION WITH **CHEMICAL FASTENERS**

A chemical joint is formed between the anchor rod and concrete through applying a two-component compound in the hole.



CHOOSE THE RIGHT CHEMICAL ANCHOR

	ECM		CM300E		ICE	
	Works perfectly	Tech. 3rd party doc*	Works perfectly	Tech. 3rd party doc*	Works perfectly	Tech. 3rd party doc*
Installation with stud bolt/threaded rod in concrete	X	X	X	X	X	X
Installation with stud bolt/threaded rod in cracked concrete					X	X
Installation with rebar in concrete	X		X		X	X
Installation with stud bolt/threaded rod in masonry	X	X	X		X	
Installation with stud bolt/threaded rod in lightweight concrete	X		X		X	
Installation in damp holes	X	X	X	X	X	X
Installation in water filled holes	X	X			X	X
Resistance with chemical substances			X	X	X	X
Electrical conductivity, does not conduct current			X	X		
Use in temp. -40°C to +40°C (short time)	X	X	X	X	X	X
Use in temp. -40°C to +80°C (long time)			X	X	X	X
Installation temperature -5 °C to +20 °C	X	X	X	X	X	X
Installation temperature -10 °C to -5 °C					X	X
Installation temperature -26 °C to -10 °C					X	
Fire resistance			X	X	X	
In contact with drinking water			X	X		
Minimal "bleeding"	X		X		X	
Odourless			X			
Install upwards in e.g. ceiling	X	X	X	X	X	X

* Technical third party document means that the 3rd party has approved installation e.g. ETA, CE or another external party.

Withstands large temperature changes



CM300E CHEMICAL ANCHOR

- For reinforcement of stud bolts, threaded rods, reinforcement iron and installation of flagpoles.
- Perfect for installation of balconies.
- Fire rated
- Applied with a standard cartridge gun.
- Not classified as hazardous to health or the environment.
- Free of danger symbols.
- Styrene and phthalate free.
- Multiple approvals.
- Drinking water approved.

MULTIPLE APPROVALS



**DROP-FREE
CHEMICAL
ANCHORS**



CONCRETE



LIGHTWEIGHT
CONCRETE



HOLLOW FLOOR
STRUCTURES



STONE MATERIAL



SOLID BRICK



HOLLOW BRICK

Free of styren symbols



ECM CHEMICAL ANCHOR

- For reinforcement of stud bolts, threaded rods, reinforcement iron and installation of flagpoles.
- High load capacity in all types of board materials.
- Not classified as hazardous to health or the environment.
- Styrene and phthalate free.



CONCRETE



LIGHTWEIGHT
CONCRETE



HOLLOW FLOOR
STRUCTURES



STONE MATERIAL



SOLID BRICK



HOLLOW BRICK

TIP! For a higher load carrying capability, increase the installation depth.

For installation in winter climate



ICE CHEMICAL ANCHOR

- For anchoring stud bolts, threaded rods and rebar.
- Product bleeds minimal in to the material.
- Approved for installation in water filled holes.
- Quick curing at room temperature.



CONCRETE



LIGHTWEIGHT
CONCRETE



HOLLOW FLOOR
STRUCTURES



STONE MATERIAL



SOLID BRICK



HOLLOW BRICK

CORRECT INSTALLATION WITH CHEMICAL ANCHOR



*The hole diameter must be 2 mm larger than the item to be anchored.**



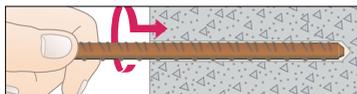
*Blow out the hole with a pump. Use at least 4 strokes. If you do not clean the hole from dust, the chemical anchor will not fix to the hole's walls. **Do not use a vacuum cleaner as the result will not be the same.***



To remove additional dust, brush the hole with the brush. Use at least 4 strokes. Blow out the hole again, brush out and blow out for a third and final time.



Fill at least 2/3 of the hole with Chemical anchor and twist down the iron/bolt to remove any air pockets.



**See Technical data for more information.*



The packaging and the technical data sheet include complete installation instructions. Please refer to our installation video or contact our support department for advice.

INSTALLATION WITH PLUG

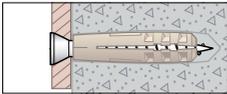
The screw should always go through the plug for correct installation.
The screw's length = the plug's length + the material's thickness + 5 mm.

Porous material



NYLON PLUG NL

- Outward ribs prevent the plug from rotating.
- Available in the dimensions 8, 10 and 12 mm.
- Withstands temperatures between -30 °C and +100 °C.



*Push the plug into the predrilled hole.
The screw should always go through the plug by 5 mm.*



LIGHTWEIGHT
CONCRETE



HOLLOW FLOOR
STRUCTURES



HOLLOW BRICK

EXPANSION

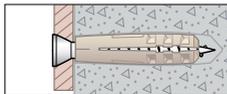


Hard material



NYLON PLUG N

- Outward ribs prevent the plug from rotating.
- Available in the dimensions 4–20 mm.
- Withstands temperatures between -30 °C and +100 °C.



*Push the plug into the predrilled hole.
The screw should always go through the plug by 5 mm.*



CONCRETE



STONE MATERIAL



SOLID BRICK

EXPANSION

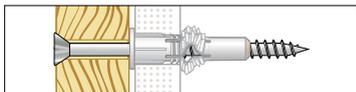


All material



UNIVERSAL PLUG

- Expands to different degrees depending on the material the plug is used in.
- Strong wings prevent the plug from rotating in the whole.
- Available in the dimensions 5–10 mm.
- Withstands temperatures between -50 °C and +80 °C.



Push the plug into the predrilled hole and drive in the screw.



CONCRETE



LIGHTWEIGHT
CONCRETE



BOARD MATERIAL

EXPANSION 



SOLID BRICK



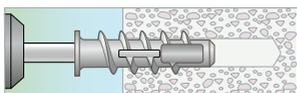
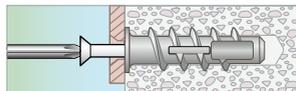
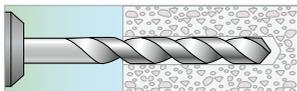
STONE MATERIAL DRYWALL

Lightweight concrete



LIGHTWEIGHT CONCRETE PLUG TURBO T/TM

- Turbo plug is intended for expansion-free fixing in lightweight concrete.
- Made of nylon (T) or zinc (TM).
- TM is suitable for installation in ceilings where fire protection is required.



LIGHTWEIGHT
CONCRETE





SERVICES

ESS-CON* YOUR FASTENER STORE DIRECTLY ON SITE

With ESS-CON you can have all fasteners available directly on site. You do not have to go back and forth to the hardware store, while having better control of consumption and you can reduce waste. ESS-CON is ordered and delivered by your hardware store, and together you compile an assortment adapted to the different phases of the building project.

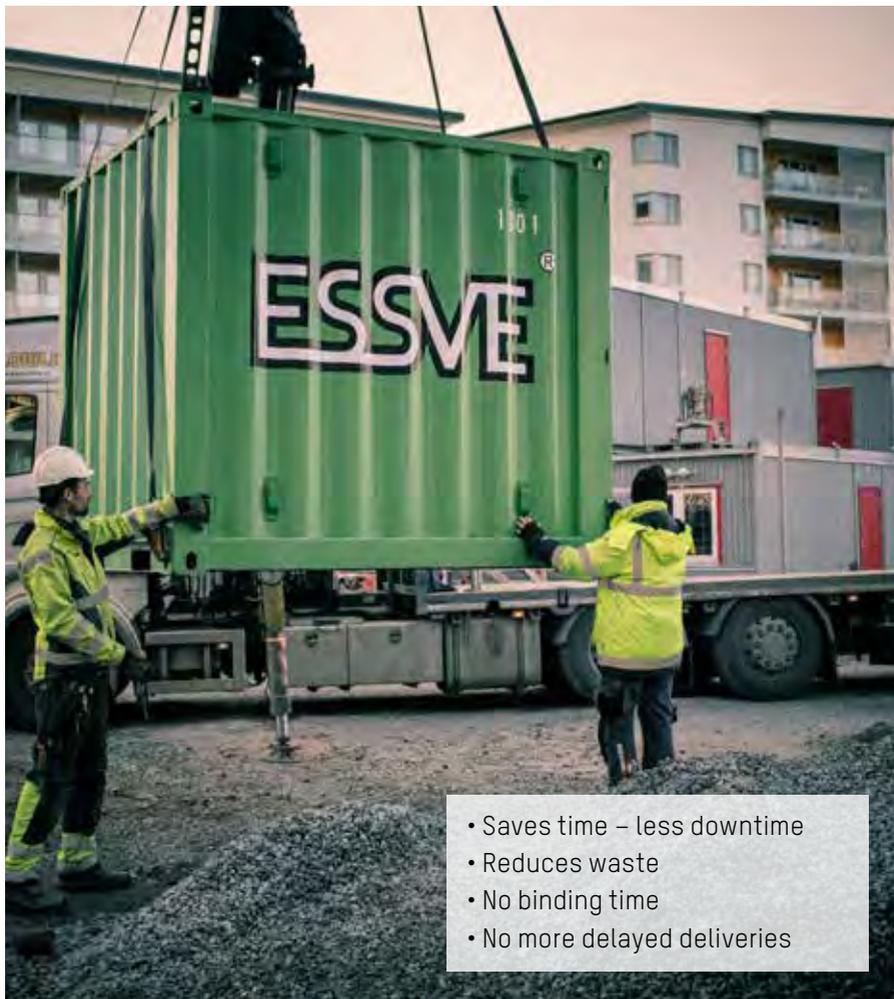


**INCREASE
EFFICIENCY
& IMPROVE
PROFITABILITY**

DID YOU KNOW?

2-3 % of the overall cost in a building project consists of consumables, yet they account for more than 60 % of the acquisition period.

**Some of these services may not be available in your region.*



- Saves time – less downtime
- Reduces waste
- No binding time
- No more delayed deliveries

8 FEET ISO-certified shipping container

WEIGHT

Fully loaded **2 050 kg**
Net **950 kg**

DIMENSIONS

W: **150 cm** D: **210 cm** H: **180 cm**

EQUIPMENT

- Interior
(left side **210 cm**, right side **90 cm**)
- Lighting
- Distribution panel **3-phase**

**Some of these services may not be available in your region.*



DESIGN SOFTWARE FOR DESIGN ENGINEERS*

ESSVE's design software CS make product selection easier and there is less risk of incorrect calculations. The software calculates the strength of the fasteners and suggests suitable products to meet the current conditions.

INTELLIGENT SOFTWARE THAT REDUCES WORKING TIME

- Software in Swedish - saves time for both the design engineers and the builders who need to follow the drawings.
- Suggestions for improvements are given directly if an incorrect value is entered.
- Automatic recalculation after each data entry – reduces the risk of errors.
- Unique selection management makes product selection quicker and easier.
- The user can save each calculation.
- The software takes calculation standards and regulations into consideration.
- Table data entry can be done directly in the 3D view.

ESSVE Calculation Software – Can be downloaded free of charge from essve.se

TIP!

Do you want to replace drawn products to ESSVE, use our calculation software or contact our Technical support.

**Some of these services may not be available in your region.*



PULL-OUT TESTING* ENSURE LASTING INSTALLATION

Even if you have chosen the right type of fastener and performed correct installation, durability can differ depending on the material it is fastened in. By performing a pull-out test on the actual building, we can identify the strength level and in doing so ensure a safe installation. Pull-out testing is a service that ESSVE preforms. Contact our local technical expert or our customer support via order@essve.se, +46 8-623 61 50 for more information and book a time.



TECHNICAL ADVICE* SUPPORT ON SITE

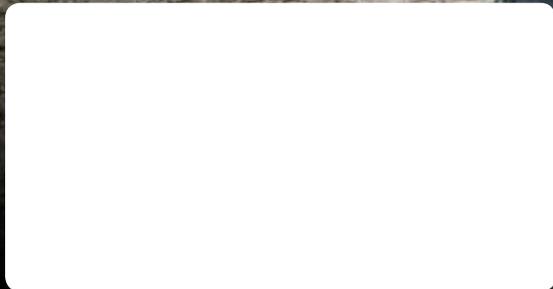
The wrong choice of fastener can jeopardise the strength and safety of an installation. ESSVE offers free support where an expert visits the building site to ensure installation is performed correctly. Contact our local technical expert or our customer support for more information and book a time.

**Some of these services may not be available in your region.*

READ MORE ABOUT ESSVE AND
OUR PRODUCTS ON ESSVE.COM



FALCK & CO., February 2018, Edition 350 ex.
All information in this printed matter is given in accordance with known facts and information at the time of writing. The information is subject to change without further notification.
An advice given by ESSVE should only be seen as indicative and does not mean that ESSVE can be held responsible for the advice provided. It is always the customer's responsibility
to check the own risk, to decide on the choice of product, usage, applications, etc. The supplier's advice is only part of the customer's decision-making data.



ESSVE

GET IT DONE

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