



PACKAGING & HANDLING STANDARD

Vertical protective packaging system for fabricated porcelain worktops, panels, laminated elements and large-format components.

A rigid, vertical and externally braced packaging method.

The Zenith system protects fragile finished components by combining surface isolation, rigid face protection, vertical strapping, controlled separation and timber restraint into one transport-ready pack.

Purpose

This document formalizes the packaging configuration visible in the supplied Zenith production photographs and converts it into a repeatable workshop standard. The objective is to preserve dimensional accuracy, surface finish, edge integrity and safe vertical orientation from final inspection through internal handling, transport, storage and site unpacking.

Applicable product families

PORCELAIN WORKTOPS VANITY TOPS TABLE TOPS

FABRICATED PANELS PORCELAIN + GLASS

LONG NARROW PARTS

Method boundary. This manual describes the packaging architecture and process. Exact timber sections, fastener sizes, strap rating/tension, maximum pack mass and vehicle lashing calculations cannot be measured from photographs and must remain controlled engineering values validated by Zenith for each transport mode.

Five protection principles

- 1. No hard contact.** Finished surfaces and edges are isolated from timber, straps, metal and adjacent products.
- 2. Keep vertical.** The pack is designed to move and stand in the same controlled upright orientation.
- 3. Restrain movement.** Straps stabilize the protected unit; timber braces stabilize the package group.
- 4. Spread loads.** Contact forces are transferred through broad boards, pads and timber support points - not through exposed porcelain edges.
- 5. Make handling obvious.** Orientation, fragility, origin and pack identification are visible from the exterior.

Document control

Document code ZP-PKG-01

Revision 1.0

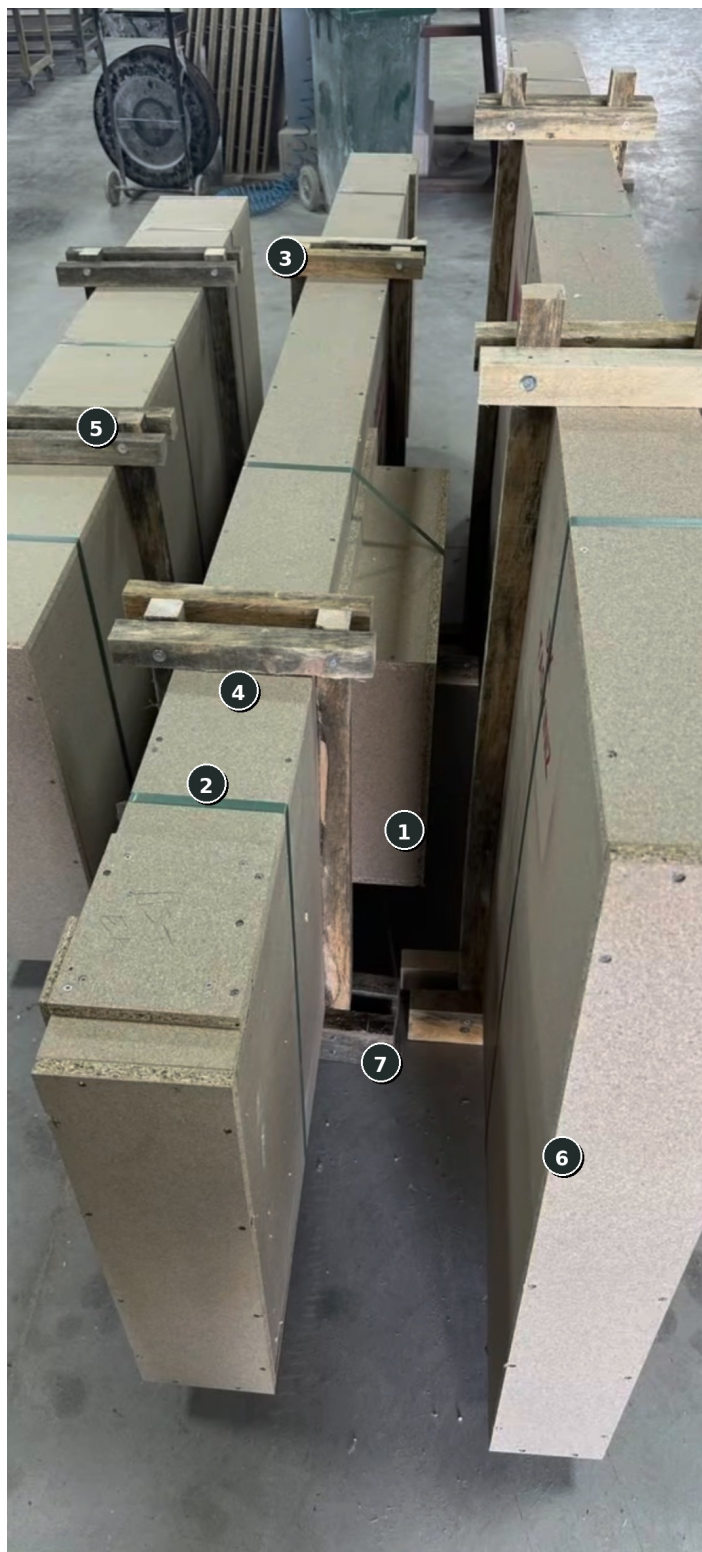
Issue date October 2026

Owner Zenith Porcelain - Production / Quality

Status Workshop Packaging Standard

Source Observed Zenith packaging configuration + formalized operating controls

Protection layers and external restraint.



Supplied workshop photo. Numbered callouts identify visible packaging features; component dimensions are not inferred from the image.

- 1 **Rigid face protection.** Large boards shield the broad finished faces from impact, abrasion, tool contact and strap marking.
- 2 **Vertical banding.** Green straps hold the protective envelope together and limit relative movement of the packed component.
- 3 **Top timber clamp.** A cross member spans the pack and locks into the vertical timber support, creating a removable brace.
- 4 **Vertical timber post.** External timber members act as a stand-off and restraint so external loads are not applied directly to the protected product.
- 5 **Wooden spacer / foot geometry.** Timber blocks create local clearance and improve stability around the base/support points.
- 6 **Upright orientation.** Components are stored and handled on edge, consistent with the visible vertical restraint concept.
- 7 **Controlled separation.** Gaps between packages reduce face-to-face rubbing and allow timber restraints to work independently.

Critical control: timber must never bear directly on an exposed finished edge. A rigid board, edge protector and/or cushioning layer must always sit between the product and any structural brace.

Finished pack identification and grouped handling.

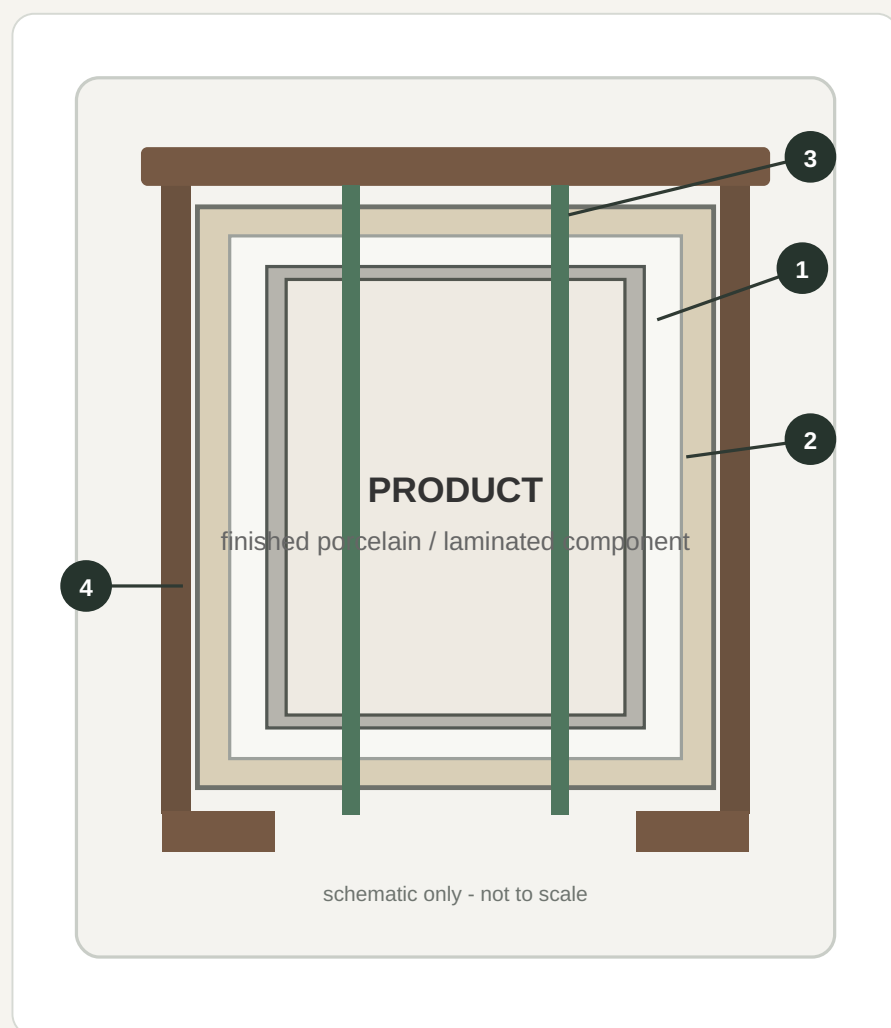


Supplied workshop photo showing completed protected assemblies, orientation markings, timber restraint and nearby forklift handling context.

- 1 **Fragility warning.** Existing stencil communicates breakage risk. Export packs should use standardized English wording and pictograms in addition to local language where required.
- 2 **Country-of-origin marking.** The pack visibly carries the manufacturing origin marking. Recommended export wording: **MADE IN TÜRKİYE.**
- 3 **Independent vertical straps.** Each protected unit is restrained as its own package before external grouping.
- 4 **Timber group restraint.** Removable timber braces prevent packs from falling toward or away from the group during stationary handling.
- 5 **Multiple pack grouping.** Packs are positioned in parallel, allowing consistent upright staging and efficient loading sequence.
- 6 **Base stability.** Timber feet / blocking provide controlled support and should be located so product edges do not carry point loads.
- 7 **Mechanical handling environment.** Forklift movement is part of the workflow; forks must engage approved support points only, never the protective board itself.

Do not treat the timber top brace as a lifting handle. Its function is restraint and stabilization. Lifting must be from an engineered base/rack or approved lifting device.

Four protection zones, one controlled pack.



- 1 Surface & edge isolation.** Soft, non-abrasive protection prevents scratches and isolates polished/finished surfaces from rigid materials. Corners receive dedicated protection.
- 2 Rigid protective envelope.** Board on both broad faces distributes local loads and protects against accidental impact. Board edges should extend beyond the product wherever practical.
- 3 Strapping restraint.** Bands close the protective envelope. Straps require edge/corner protection and should cross structurally supported zones, not unsupported cut-outs.
- 4 External timber restraint.** Timber posts, top clamps and base blocking stabilize the complete pack without making direct contact with exposed porcelain.

Cut-outs: bridge weak zones before strapping; never pull strap force across an unsupported sink/hob bridge or mitered return.

Every layer has one job - and one acceptance test.

Component	Function	Workshop requirement	Release check
Surface interleaf	Prevents abrasion and contamination.	Clean, dry, non-abrasive; covers all polished/decorative contact zones. No trapped grit, metal chips or adhesive residue.	No direct finished-face contact.
Edge / corner protector	Prevents impact damage and strap pressure on fragile edges.	Continuous at critical edges and corners; cannot slip out during strapping; must not mark the finish.	All exposed edges isolated.
Rigid face board	Spreads impact and compression across a broad area.	Flat, dry and undamaged. Full-face coverage preferred; locally reinforced where projections or cut-outs create vulnerable zones.	No puncture, crush or severe bow.
Strapping	Closes and stabilizes the protected unit.	Use approved packaging strap. Tension must secure the pack without crushing board or inducing product bend. Keep strap away from unsupported openings and projecting finished edges.	Secure, straight, no cutting-in.
Timber posts / braces	External structural restraint and stand-off.	Sound, dry timber; no protruding nails/screws; contact only through protective layers. Brace geometry must resist pack tipping in the intended direction.	No split timber or sharp hardware.
Base blocks / feet	Creates clearance and stable load path.	Position under supported zones. Product must not rest on a single corner, cut-out bridge or unsupported thin edge.	Stable on level floor.
Labels / stencil	Communicates identity, orientation and handling risk.	Readable from normal approach direction; permanent enough for full logistics cycle; placed on more than one visible face where required.	Pack ID and orientation visible.
Moisture protection	Protects board and surfaces during variable conditions.	Use when transport/storage may involve humidity or splash. Do not trap wet product inside closed film.	Pack is dry before closure.

Controlled engineering values to be approved by Zenith

Maximum product mass per pack:

Maximum overall pack dimensions:

Approved strap specification / rating:

Approved timber section & grade:

Maximum unsupported brace spacing:

Zero-tolerance defects

Exposed porcelain touching timber or metal; strap directly on a finished edge; grit trapped against a decorative face; pack leaning without restraint; unsupported cut-out under strap load; damaged timber brace; unreadable or missing orientation label.

Packaging sequence - from final QC to release.

- 1 Confirm product status**
 Packaging starts only after machining, bonding and finishing are complete, surfaces are dry, and the item has passed final dimensional/visual inspection.
- 2 Record identification**
 Capture project/order number, item ID, material/colour, final dimensions, quantity and intended destination. Photograph the product before covering.
- 3 Clean the product**
 Remove slurry, abrasive dust, glass/porcelain chips, metal swarf and adhesive residue. A single hard particle trapped inside the pack can permanently scratch a face.
- 4 Protect finished surfaces**
 Apply clean non-abrasive interleaf or approved soft protection to all decorative faces and vulnerable bonded interfaces.
- 5 Protect edges and corners**
 Fit edge/corner protectors before rigid boards. Give extra attention to mitres, narrow returns, polished edges and long thin projections.
- 6 Install rigid face boards**
 Place protective boards on both broad faces. Align boards so they do not create isolated pressure points and so the product is not exposed beyond the protective envelope.
- 7 Stabilize cut-outs**
 For sink/hob holes or other openings, bridge weak zones with rigid blocking or a backing panel. Do not position strap force across an unsupported bridge.
- 8 Apply unit straps**
 Band the protected unit vertically. Use enough independent restraints to prevent opening or sliding. Tension evenly; stop before board crush, edge indentation or visible bowing.
- 9 Place pack upright**
 Move the unit to the vertical staging area using approved handling equipment. Seat it on stable, level support points and maintain positive control while upright.
- 10 Fit timber bracing**
 Install posts, base blocks and removable top clamps so the package cannot tip. Timber bears on protective material - never directly on porcelain.
- 11 Mark and label**
 Apply pack ID, orientation arrows, FRAGILE / KEEP UPRIGHT markings, destination and country of origin. Add gross weight once a verified weighing method is available.
- 12 Final release**
 Complete the packaging checklist, take photos from both faces and each end, sign QC release, then move the pack only according to the handling instructions in this manual.

Operator rule: if any protective board, strap or timber member must be forced into position, stop and correct the pack geometry. Restraint should stabilize the product - not deform it.

Restrain the package without loading the product.



Visible removable timber clamp / post arrangement.



Visible vertical arrangement, separation and base support zones.

Timber restraint rules

- Provide restraint near both end zones; add intermediate braces wherever a long span would remain free to move.
- Top cross-members must lock the vertical post without crushing the protected board.
- All screw/bolt heads and timber ends must remain outside finished-product contact zones.
- Base blocks must sit under structurally supported product areas, not under a fragile projection or narrow bridge.
- Timber members must be free of splits, loose knots, protruding fasteners and contamination that could transfer to the pack.

Strapping rules

- Straps close the protective envelope; they are not a substitute for a stable support frame.
- Use edge protectors anywhere strap pressure changes direction over a corner.
- Keep straps straight and approximately perpendicular to the long edge to prevent diagonal slip.
- Do not place strap load across sink/hob cut-outs, narrow miter returns, drilled zones or unsupported cantilevers.
- After tensioning, inspect both faces for board crush, local bowing or edge imprint. If observed, release and re-pack.

Acceptance condition

With the pack standing vertically on a level surface, the protected unit must remain stable without visible rocking, the timber restraints must not be loose, and no component may carry a concentrated load on an exposed porcelain edge. External restraint must be removable without prying against the product.

Make the correct handling action visible before anyone touches the pack.



Existing workshop markings visible in the supplied photo: fragility warning, upright orientation and origin.

ZENITH PORCELAIN - PACK ID

ZP / PROJECT

VERTICAL PROTECTIVE PACK

Project / Customer: _____

Order / Item ID: _____

Material / Colour: _____

Finished Size: _____

Quantity in Pack: _____

Gross Weight: _____

Destination: _____

Packed by / Date: _____

QC Release: _____

↑ **KEEP UPRIGHT** ↑ **FRAGILE**

Recommended exterior markings

FRAGILE - PORCELAIN PRODUCT

KEEP UPRIGHT / DO NOT LAY FLAT

**FORKLIFT FROM APPROVED BASE
ONLY**

MADE IN TÜRKİYE

Use durable, high-contrast marking. Repeat critical orientation/fragility information on at least two externally visible faces when practical.

Traceability package: retain pre-pack product photo, completed pack photos, pack ID, order/item ID, packing operator and QC release in the job record. For claims analysis, the photo set should show both broad faces, both ends and the base support arrangement.

Control the center of gravity; never improvise the lift point.

Forklift / pallet truck controls

- Qualified operator only. Use a spotter where visibility of the pack, floor or personnel is restricted.
- Forks engage the approved base/rack or dedicated timber support arrangement - not the protective board and not the porcelain edge.
- Set fork spacing as wide as the approved support geometry permits to reduce tipping tendency.
- Lift only enough to clear the floor. Avoid sudden acceleration, braking, sharp turns and uneven surfaces.
- Keep the package vertical and positively controlled. Do not allow it to swing or lean freely.
- Never lift from a timber top brace, strap, cardboard face board or projecting worktop feature.

Manual handling controls

- Do not remove restraint until the product is supported by a suitable rack, lifting device or sufficient trained handlers.
- Use suction lifters / appropriate handling equipment on clean, compatible surfaces where approved.
- Hands and feet must stay clear of the lower edge and pinch points between adjacent packs.
- Do not roll, pivot or “walk” the product on a finished corner.
- Do not drag one protected pack against another; move each pack under positive control.

If the pack leans unexpectedly: do not attempt to stop a large component by hand. Clear the fall zone and use appropriate mechanical restraint/recovery methods.

01

Move upright

The protected pack should retain its designed vertical orientation during staging and handling.

02

Lift from structure

Forces go into the approved base/rack or lifting device - never into the face board or fragile edge.

03

Keep restraint on

Remove braces and straps only after the product has an independent stable support.

Floor condition: stage packs only on level, clean, structurally adequate surfaces. Loose debris beneath a base block can create uneven loading and pack instability.

The protective pack is only one part of the logistics system.

Vehicle loading

- Use a vehicle arrangement designed to keep the package upright: approved rack, frame, side support or engineered blocking/bracing system.
- Vehicle restraints must secure the load to the vehicle structure; do not rely solely on product-pack straps.
- Protect every ratchet/lashing contact point so webbing or hardware cannot cut into face boards or product edges.
- Do not place heavy cargo against the broad face of the porcelain pack.
- Prevent longitudinal and lateral movement under braking, cornering and road vibration.
- Load sequence should allow safe removal without first destabilizing adjacent packs.

Storage

- Keep indoors or under effective weather protection; board/timber packaging must remain dry and structurally sound.
- Store upright on a level base and retain anti-tip restraint.
- Do not stack another load on top of the pack unless a separate engineered frame carries the load.
- Quarantine any pack showing water damage, crushed board, broken timber, slack strap or loss of vertical stability.

Site unpacking sequence

1

Inspect before opening

Photograph the delivered pack and record any external damage before straps or braces are removed.

2

Stabilize independently

Position the pack at the approved unloading area and secure the product/rack so it cannot move when external restraint is released.

3

Remove timber restraint

Release top clamps and posts without prying against the product. Maintain control of loose timber and hardware.

4

Release straps carefully

Cut/release straps while the product is supported. Avoid recoil toward personnel or finished surfaces.

5

Open protection layers

Remove boards and interleaf progressively; do not allow boards to fall against the finished face.

6

Final arrival inspection

Check surfaces, edges, bonded details and cut-outs. Compare to pre-pack photos and record discrepancies immediately.

PACKAGING QC - RELEASE ONLY WHEN EVERY ITEM PASSES.

- | | |
|--|--|
| ☐ Product ID matches order / project documents. | ☐ Final dimensions and quantity verified. |
| ☐ Product is clean and completely dry before closure. | ☐ Pre-pack condition photos completed. |
| ☐ Decorative faces protected by clean non-abrasive layer. | ☐ All vulnerable edges/corners protected. |
| ☐ Rigid face boards cover the product adequately. | ☐ Cut-outs / narrow bridges are supported or bridged. |
| ☐ Straps are straight, secure and not over-tensioned. | ☐ No strap bears directly on exposed porcelain. |
| ☐ Timber is sound; no sharp/protruding hardware. | ☐ Timber bears only through protective materials. |
| ☐ Base support is stable with no rocking. | ☐ Pack remains upright and positively restrained. |
| ☐ FRAGILE / KEEP UPRIGHT markings visible. | ☐ Pack ID and destination label attached. |
| ☐ Country-of-origin marking applied where required. | ☐ Final pack photos completed (faces, ends, base). |
| ☐ Handling route and loading method confirmed. | ☐ QC release signed before movement to dispatch. |

Nonconformance triggers

Re-pack immediately if there is exposed product contact, crushed board, broken timber, unstable base, loose restraint, incorrect orientation, missing identification, suspected impact, water damage or any visible product movement inside the protective envelope.

Continuous improvement record

Any transit damage claim should be linked back to the pack photo record, pack ID, route, handling method and damaged location. Use the evidence to update controlled strap/bracing specifications and standard work instructions.

ZENITH PORCELAIN

Precision in production. Control in packaging. Confidence in delivery.

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Revision 1.0 - October 2026
End of controlled booklet