

LEANDER ARCHITECTURAL | HYBRID COLUMNS

INTERNAL SALES / DESIGN QUICK REFERENCE

PURPOSE

Use during an enquiry to establish what is needed to QUOTE, SPECIFY and DRAW a hybrid column.
Do not guess structural requirements.

ENQUIRY REFERENCE:

PAGE 1 | ENQUIRY CHECKLIST - DO WE HAVE ENOUGH INFORMATION?

1 WHAT IS THE COLUMN DOING?

- ☐ Project / location
- ☐ What does it support?
- ☐ Canopy / veranda / sign / other
- ☐ Number of columns
- ☐ New build / replacement / match existing
- ☐ Architect / GA drawings available?

Get photos/drawings where possible.

5 TOP CONNECTION / LOAD PATH

- ☐ What connects at the top?
- ☐ Canopy beam / bracket / frame detail
- ☐ Connection drawing available?
- ☐ Loads eccentric or centred?
- ☐ Any concealed fixing requirement?

Make sure the structural engineer has enough information to design the connection as well as the column.

2 STRUCTURAL INFORMATION

WE NEED EITHER:

- ☐ Structural loading requirements; OR
- ☐ Column size/specification from client's Structural Engineer

If neither exists, Leander can arrange an independent Structural Engineer.

DO NOT select the steel core from appearance alone.

6 BASE / FOUNDATION / FIXING

- ☐ Existing or new foundation?
- ☐ Root / embedded arrangement?
- ☐ Bolt-down base plate?
- ☐ Foundation / holding-down bolt details available?
- ☐ Finished ground / floor level known?

Do not assume an existing foundation is suitable.

3 COLUMN SIZE / GEOMETRY

- ☐ Overall finished height
- ☐ Required shaft diameter / visual proportions
- ☐ Connection levels
- ☐ Head / base constraints
- ☐ Any clearance requirements

The structural core size is project-specific. Do not assume the Ø89/Ø76 fingerpost arrangement applies to structural columns.

7 MATERIAL / FINISH

Typical concept:

- Galvanised structural steel core
- Cast aluminium decorative components

Confirm:

- ☐ Internal / external
- ☐ Paint colour / RAL
- ☐ Highlighting
- ☐ Match existing?
- ☐ Any project finish specification

4 APPEARANCE / COMPONENTS

- ☐ Reference style / existing column
- ☐ Decorative base required?
- ☐ Shaft treatment / collars
- ☐ Capital / top detail
- ☐ Decorative brackets?
- ☐ Bespoke crest / motif / casting?

A decorative base is NOT automatically required.

8 SCOPE / RESPONSIBILITY

- ☐ Supply only / installation
- ☐ Who provides structural design?
- ☐ Who designs foundation?
- ☐ Who designs connections?
- ☐ Site access / lifting constraints
- ☐ Delivery postcode

Record responsibilities clearly in the quotation.

WATCH OUT

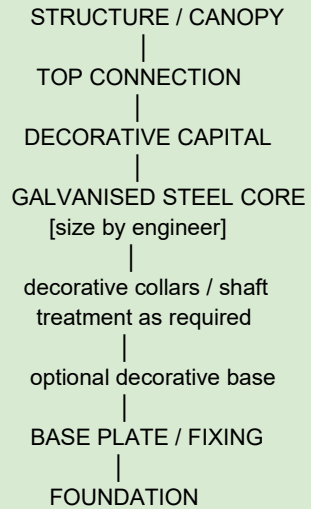
A HYBRID COLUMN IS NOT A STANDARD STRUCTURAL SIZE. The decorative appearance and the structural steel core are related, but the steel section must be driven by the project loads / engineer's specification.

MINIMUM BEFORE QUOTING / DRAWING

- ☐ Application & quantity
- ☐ Height / geometry
- ☐ Loads OR engineer's column specification
- ☐ Decorative style
- ☐ Top connection
- ☐ Base/fixing
- ☐ Finish
- ☐ Structural-design responsibility

PAGE 2 | HYBRID COLUMN CONSTRUCTION + SALES → DESIGN HANDOVER

WHAT IS A HYBRID STRUCTURAL COLUMN?



The STEEL CORE provides the structural strength.
The CAST ALUMINIUM components provide the architectural appearance.

STRUCTURAL DESIGN - TWO ROUTES

ROUTE A - CLIENT'S ENGINEER

Client / project Structural Engineer provides:

- required column size/specification; or
- sufficient loading / connection information.

Leander develops the decorative column around that requirement.

ROUTE B - LEANDER ARRANGES ENGINEER

Where no structural design exists, Leander can engage an independent Structural Engineer.

Sales must obtain enough project information for the engineer to work from.

DECORATIVE DESIGN

Select the appearance AFTER understanding the structural requirement.

Consider:

- ☐ Base style
- ☐ Main shaft proportions
- ☐ Transition / collars
- ☐ Capital
- ☐ Brackets
- ☐ Historic matching
- ☐ Bespoke castings
- ☐ Colour / highlighting

WATCH OUT:

Do not promise that a particular decorative casting will fit around an unknown structural core.

INFORMATION TO SEND TO THE STRUCTURAL ENGINEER

Where Leander is arranging structural design, gather as much of the following as applies:

- ☐ GA / architectural drawings
- ☐ Column positions and quantity
- ☐ Finished column height
- ☐ Roof / canopy geometry
- ☐ Loads / reactions already available
- ☐ Beam / bracket / head connection details
- ☐ Foundation / base constraints
- ☐ Site location and exposure information
- ☐ Any required structural section / visual diameter limits
- ☐ Relevant project specifications

If information is missing, identify it - do not invent it.

FINAL DRAWING MUST MAKE CLEAR

- ☐ Structural steel core section / specification
- ☐ Overall height and key levels
- ☐ Decorative component references
- ☐ Capital / head detail
- ☐ Top connection interface
- ☐ Base plate / root / fixing arrangement
- ☐ Finished ground / floor level
- ☐ Paint / finish specification
- ☐ Quantity
- ☐ Any bespoke castings
- ☐ Structural Engineer / drawing reference where applicable

Keep decorative and structural information clearly distinguishable.

STANDARD SALES → DESIGN HANDOVER

PROJECT / QUOTE: _____ QTY: _____ LOCATION: _____

APPLICATION / WHAT IT SUPPORTS: _____

OVERALL HEIGHT / KEY LEVELS: _____

STRUCTURAL BASIS: ☐ Client engineer specification attached ☐ Loads attached ☐ Leander to arrange engineer

CORE / COLUMN SPEC (if known): _____

DECORATIVE STYLE / BASE / CAPITAL / COLLARS: _____

TOP CONNECTION: _____ BASE / FIXING: _____

FINISH / RAL: _____ SUPPLY / INSTALL: _____

CUSTOMER DOESN'T KNOW THE LOADS?

Ask whether they have a Structural Engineer. If not, explain that Leander can arrange structural engineering, but we will need project drawings and loading/design information.

MATCHING AN EXISTING COLUMN?

Get clear photographs, overall dimensions, base/shaft/capital dimensions and any available drawings. Establish whether the existing column is structural before proposing a replacement.

KEY RULE

QUOTE THE DECORATIVE CONCEPT ONLY when the structural basis is unresolved. Do not imply that an unverified steel core, foundation or connection is structurally suitable.