

PRODUCT DATA & CUSTOMIZATION

U-Shaped Aluminum Baffle Ceiling

Technical & Installation Guide

An open linear ceiling made from formed aluminum sheet. Common grades include A1100 (1xxx series) and A3003 (3xxx series). Parallel U-shaped profiles create a defined ceiling plane while leaving gaps for coordinated building services and access. Material grade, finish and suspension details are confirmed for each order.

Manufacturer specification

Base material	Common grades: A1100 (1xxx series) and A3003 (3xxx series). Confirm the selected grade, temper, applicable standard and material documentation with the order.
Profile range	Minimum: 20 mm base width x 40 mm height. Maximum: 200 mm base width x 200 mm height. Individual width-height combinations require fabrication review.
Nominal wall thickness	Regular range: 0.4-1.2 mm. Suitability depends on profile size, length, supports and project requirements; not every size-thickness combination is suitable.
Surface finishes	Powder coating, fluorocarbon (PVDF) coating and wood-grain finishes. Confirm coating system, exposure suitability, color and gloss with a physical sample.
Custom details	Length, baffle spacing, suspension drop, end details and compatible carriers. Curved forms require radius and prototype review.

Application fit

- Factories:** coordinate gaps with designed lighting, ventilation and exhaust.
- Offices:** organize the ceiling visually and allow planned service access.
- Stations & airports:** coordinate linear layouts with lighting, fire services and maintenance routes.
- Retail:** adjust visual density using profile dimensions, spacing and finish.

Plain aluminum baffles do not carry a declared sound-absorption rating. Fire classification and lighting or ventilation performance require the relevant assembly and project assessment.

FACTORY EVIDENCE & PROJECT APPROVAL

Production & project review

Monthly production capacity: 150,000 linear meters. This is profile length, not ceiling area. Actual allocation depends on profile mix, finish and the production schedule.

Quality control at each process

Quality inspectors are assigned to every production stage to identify nonconforming parts before shipment. Agree the order-specific checkpoints and acceptance limits before release. Useful records connect material batches, drawing revisions, inspection results and packing lists.

Incoming material	Confirm material documents and nominal sheet thickness; retain batch identification.
Forming & dimensions	Check base width, height, length, straightness and opening geometry against agreed tolerances.
Finish & assembly	Compare color, gloss and pattern with approved samples. Confirm the baffle-to-carrier fit on the proposed assembly.
Final release	Check quantities, labels, surface condition and packing; record correction and reinspection of nonconforming items.

Project approval gates

Confirm substrate and anchor suitability; carrier and hanger spacing; loads and required seismic restraint; fire documentation; sprinkler and detector coordination; lighting, HVAC and access clearances; coating exposure; and transport limits. Increasing wall thickness alone does not establish fire compliance.

Samples, approval & delivery

Sample preparation: 5-7 days, subject to scope and material availability; transit is additional. Curved samples or full mock-ups may need a separate schedule.

Approve the sample reference, profile dimensions, thickness, finish, carrier fit and drawing revision in writing. Bulk lead time is confirmed with the order; no fixed number of days is declared.

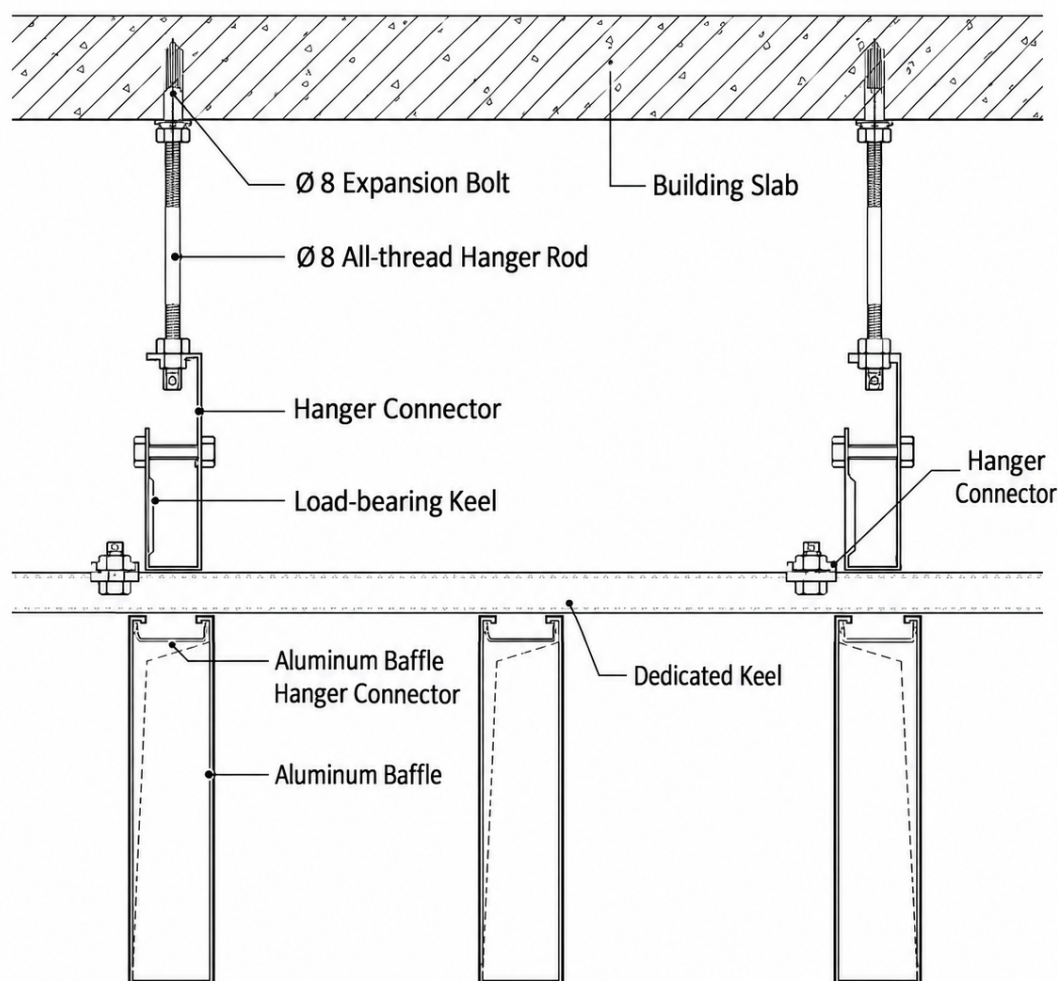
Quotation inputs: ceiling plan, location, quantity in linear meters or area plus layout, profile size, length, spacing, finish, performance requirements and target delivery.

Contact XIAOHENG - tzh-material.com/contact-us/

SUPPLIED INSTALLATION REFERENCE

Suspended baffle connection

Slab - hanger rod - main channel - baffle carrier - U-shaped profile



17
AR-77-01

Rectangular Metal Grating Ceiling Node Detail

DETAIL

Scale 1:1

Drawing terminology: “Load-bearing Keel” denotes the main support channel; “Dedicated Keel” denotes the baffle carrier. Connectors join the suspension and profile components as illustrated.

Reference only - not to scale in this PDF. The supplied drawing labels diameter-8 expansion bolts and threaded hanger rods. These callouts do not establish anchor capacity or suitability for a specific slab. Hanger spacing, carrier spacing, embedment, restraint and connections require approved project design. Lighting and other services need their own designed supports unless shared loading is expressly approved.