



SIKA AT WORK

FROM TRAIN STATION TO HOTEL, HUESCA, SPAIN

CONCRETE REPAIR: Sika MonoTop®, SikaRep®, Sika AnchorFix®, SikaGrout®

JOINT SEALING: Sikadur Combiflex® SG

WATERPROOFING: Sikalastic®

STRUCTURAL STRENGTHENING: SikaWrap®

PROTECTION: Sikagard®, SikaColor®

TILE SETTING: SikaCeram®

BUILDING TRUST



REVITALIZING OLD STRUCTURES FOR NEW PURPOSES

Transform the historic Canfranc International Railway Station to a five-star hotel

PROJECT DESCRIPTION

The project features refurbishment and adaptive reuse of the historic Canfranc International Railway Station (inaugurated 1928) into a 5-star hotel while preserving the heritage facade and architectural identity. The station was a major cross-border hub in the early 20th century and is listed as an asset of cultural interest (monument). Its transformation has become a regional anchor for tourism and employment, attracting international media attention. The total project size is 9,210.66 m².

The building (≈241 × 12 m) is a symmetrical, elongated structure of concrete, iron, stone, glass, and slate at ~1,194 m elevation in the Aragonese Pyrenees.

The project was executed in two phases:

Phase I (March 2019 – September 2020): restoration for public use of perimeter platforms and vestibule. Investment €4.74 m (excl. Vat).

Phase II (July 2021 – January 2023): refurbishment of the station building for hotel use (royal hideaway, Barceló hotel group). Investment €11.40 m (excl. Vat).

The hotel was completed and opened in January 2023 with 104 rooms and multiple f&b venues, including “canfranc express” housed in a restored carriage and awarded 1 Michelin star.

PROJECT REQUIREMENTS

Structural preservation & durability at altitude

- Reinforced-concrete facades, cornices, pillars, beams, slabs from the 1915–1928 era exhibited gravel nests, localized delamination, carbonation-induced rebar corrosion, and cracking (including around canopy fixings).
- Harsh mountain climate (freeze-thaw, limited non-frost working window ~March – October) dictated rapid-setting solutions and robust protection systems.

Heritage constraints

- Facade, profiles, colors and textures to be restored “as-original”; new work to be visually discreet (e.g., hidden crack stapling, non-intrusive strengthening).
- Expansion joints (8–10 cm, overlapped to be visually concealed) required sealing and fire sectorization without altering the front views.

Change of use & load paths

New vertical communications (stairs/elevators) and room program required local strengthening (columns, beams around shafts; stairwells) while keeping the lobby open to full height and respecting the dome/tower accents.

Execution constraints

- Works staged over winters; underside bridge deck repairs required ultra-rapid mortars and anchored build-ups to manage thickness and temperature.
- Continuous platforms and canopies on differential foundations demanded movement-tolerant sealing and flexible waterproofing around interfaces.

SIKA SOLUTIONS

Assessment & preparation

- Water-jet cleaning to remove contaminants and weak material; selective scarification around pathology and rust-stained zones.
- Rebar treatment: exposed steel brushed and passivated with Sika MonoTop®-910 S; two-coat Sika® Ferrogard®-903 Plus applied (saturation/pressure-spray) as a penetrant corrosion inhibitor and primer before coatings.





Concrete repair & reprofiling

- Gravel nests, honeycombing, and lost volumes reprofiled with SikaRep®-2400; voids/backfills with SikaGrout®-340.
- Underside bridge deck and winter-window areas: successive coats of Sika MonoTop®-3130 Ultra Rapid to achieve build-up and early strength in low-temperature conditions.
- General repair mortars: Sika MonoTop®-3120 Rapid and Sika MonoTop®-412 S deployed according to layer thickness and exposure.

Crack repair & movement accommodation

- Structural crack stapling: U-shaped perforations with M12 steel staples bonded using Sika AnchorFix®-3030 and fully embedded for invisible finish.
- Movement/control joints & sectorization: Sikadur® Combiflex® system (≈250 lm) for high-movement sealing around expansion joints and critical interfaces.

Structural strengthening

- Columns and local elements strengthened with SikaWrap®-230 C CFRP wraps to recover/upgrade capacities where reinforcement had deteriorated or load paths changed (e.g., stair cores, shaft perimeters).

- Beams around openings: localized CFRP reinforcement to control deflection and shear where new openings were introduced.

Waterproofing & facade protection

- Mineral waterproofing at sensitive exterior details with Sikalastic®-1K.
- Facade coating system: Sikagard®-711 ES (intermediate) with SikaColor®-671 W as the final acrylic topcoat in the original heritage color, delivering UV stability and CO₂ resistance while matching the historic appearance.

Tile setting

- SikaCeram®-260 Superflex used in localized bedding/tiling scopes consistent with the interior program.
- On-site specification & QA. The applicator Ainur Trabajos Verticales, S.L. executed a meticulous, stepwise methodology (clean-remove-passivate-inhibit-repair-strengthen-seal-coat), often exceeding the minimum brief (e.g., full-face reprofile with SikaRep®-2400 for quality/finish).

FROM CANFRANC TRAIN STATION TO CANFRANC ESTACIÓN HOTEL



PROJECT PARTICIPANTS

Owner: Suelo y Vivienda de Aragón, S.L.

(Gov. of Aragón – Dept. of Territorial Development, Mobility & Housing)

Architect: Ingennus Urban Consulting

(project adapted to operator, technical, and regulatory requirements)

Facades refurbishment contractor: Estudios Métodos Restauración

Interiors, access building, north access bridge refurbishment

contractor: Ainur Trabajos Verticales, S.L. (specialist applicator)

Sika Organization: Sika Spain

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.



SIKA SERVICES AG

Tueffenwies 16
CH-8048 Zurich
Switzerland

Contact

Phone +41 58 436 40 40
www.sika.com

BUILDING TRUST

