Plumbing and heating

Domestic water, heating and drainage. The plan shows equipment space allowances and identifies utility connection and maintenance checks.

Project data

Item	Project information
Design	Chiappella · Casa del Noce and Casa del Forno
Sheet scope	Water and heating
Design reference	5.10 × 2.77 m · plant room footprint
Edition	Public · 24 November 2026
Format	A3 landscape · print at 100%

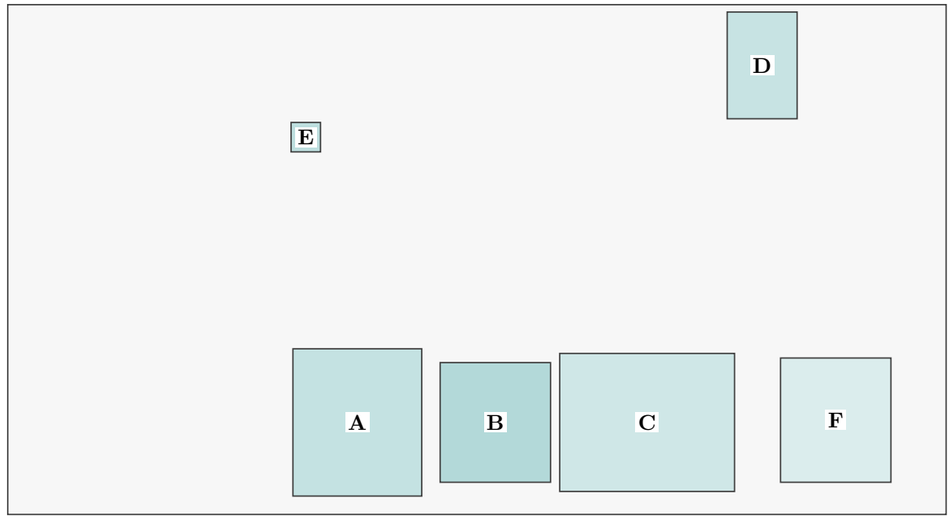
Issued by

ColivingLiguria S.r.l.
Project presentation

Preliminary design · public edition

Noce and Forno are offered for sale together. Professional reviews, utility connection conditions and municipal permits require documentary evidence.

Water and heating



Noce plumbing layout

See the plant room sheet for the legend and dimensions.

Water supply, foul drainage and rainwater

Site schematic · external connections subject to survey

Water supply

Shared utility connection

Locate meter and measure supply pressure

→

Two branches

Label an isolation valve for each house

→

Maintenance

The other house stays in service

Foul drainage · Noce

Ground- and first-floor branches

Two connections to the external collector

→

Roadside outlet

Study boundary

→

Discharge point

Confirm invert level and utility consent

Rainwater

Separate roofs

Survey gutters and downpipes

→

Surface drainage

Check falls and overflows

→

Destination

Identify the receiving system separately

Casa del Forno

Survey by floor

Fixtures, isolation valves and drains

→

Stone well

Visible envelope recorded in survey

→

Water use

Verify source and water quality

Where to measure

At Noce, the proposed inlet is on the lawn side and the outlet on the road side. Survey both against fixed walls and a common level datum. Locate the water meter and drainage manhole.

External survey

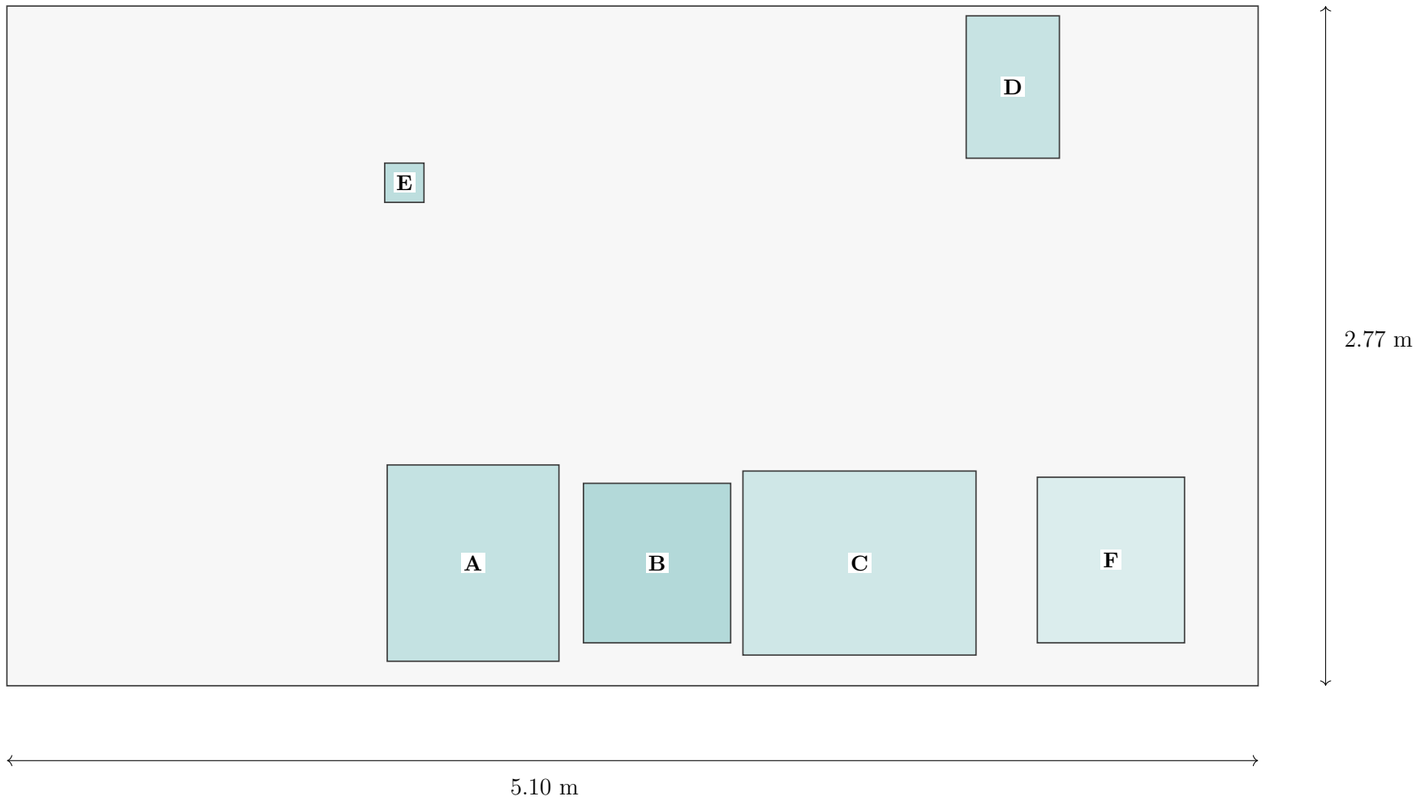
Record pipe inverts, flow direction, manhole access, boundaries, buried services and ownership. Keep foul water, rainwater and condensate separate until the receiving system is verified.

Utility contracts

One owner and shared utility contracts for both houses. Identify the branch point and provide maintenance access. The main meter location awaits survey.

Casa del Noce plant room

Proposed plant layout · scale 1:25 when printed at 100 percent



A · Heating buffer tank B · Hot-water cylinder C · Heat pump module

D · Water treatment station E · Floor drain F · Laundry

Reading the plan

The IFC plant room footprint measures 5.10 × 2.77 m. Equipment outlines represent design allowances. The dry electrical zone is included in the 14.127 m^2.

Maintenance

Three separate water services feed the ground-floor and first-floor manifolds. The ground floor has seven cold outlets, five hot outlets and four dedicated drinking taps. The main horizontal runs pass below the ventilated floor formation. Verify ground and masonry conditions before work.

Laundry and leak protection

The washer and dryer are stacked. Confirm the selected appliance's discharge, trap and floor drain connection. Water-test the installation before closing the floor.

Domestic water and heating

Schematic · domestic hot water and heating buffer storage have separate functions

Cold water

Lawn-side inlet
Proposed connection and isolation valve

→

Cold-water manifold
In the plant room

→

Fixtures
Distribution by floor

Domestic hot water

Cold-water manifold
Dedicated cylinder feed

→

Hot-water generation
Hot-water cylinder

→

Hot-water manifold
To fixtures

Drinking water

Cold-water take-off
Test incoming water quality

→

Treatment provision
Filter and space for a chiller

→

Dedicated taps
Drinking and cooking

Heating circuit

First-floor hydronic fireplace
Primary circuit and heat exchanger

→

Heat pump and buffer tank
Hydraulic module and buffer tank

→

Distribution
Underfloor heating supply and return

Design calculations

Three independent supplies serve both floors. Seven ground-floor and eight first-floor cold inlets, five hot inlets per floor and four separate drinking taps per floor have continuous verified supplies. Two heating stations connect the buffer to both sets of floor manifolds. The washer has a dedicated cold supply.

Hydronic fireplace

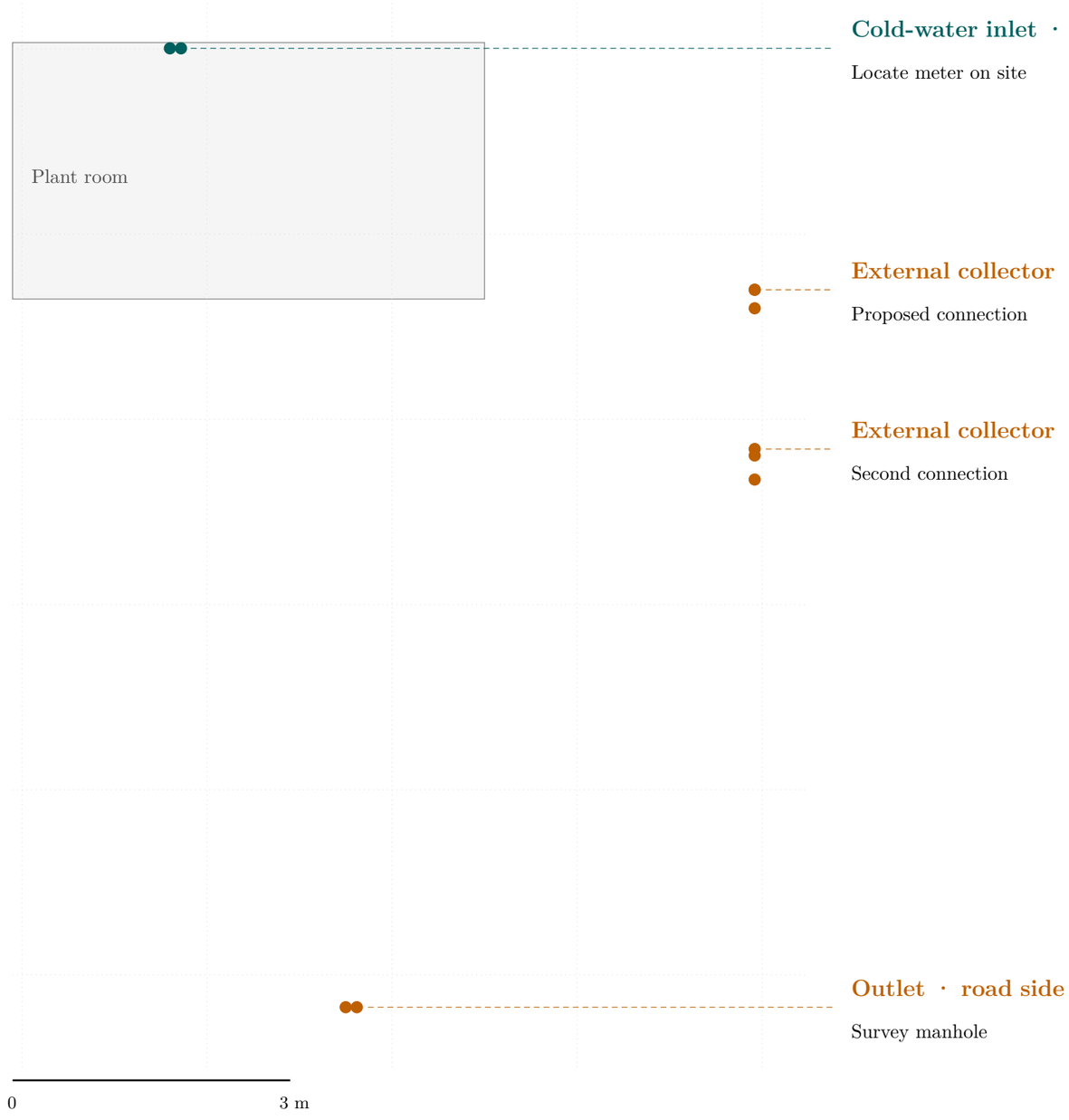
Floor-circuit tests start at the buffer. Eleven plant ports for the heat pump, fireplace heat exchanger, buffer, expansion and relief connections remain open. Complete the generation and safety circuits, including residual heat dissipation during a power cut.

Network checks

Of 33 recorded discharge points, 22 trace to the modelled site boundary. Eleven still need routing or equipment decisions. No route has verified bores at every joint. Survey the actual manhole and confirm its invert.

Water inlet and roadside drain

Noce BIM connection points · plan 1:60 · local U/V coordinates



Drawing key

Coloured points mark the centres of the proposed BIM fitting ports. The grey rectangle marks the plant room footprint. Use the plan to locate the components in the model.

Boundary levels

The roadside port centre is approximately U −0.50 m, V 3.65 m, Z −0.646 m in the local frame. Fall calculations require surveyed inverts on the same datum, internal diameters and run lengths.

Site survey

Locate covers, meter, crossings and access rights. Record the datum, surveyed point, date and an identifiable photograph. Survey the Forno inlet and outlet independently.

Symbols enlarged for legibility · survey the public services and discharge point.

Checks and design status

Requirements for detailed design

Survey and utilities

Locate the meter, discharge and manhole covers. Survey inverts to a common datum and record gradients and diameters.

Heating and plumbing design

Calculate demand and flows. Verify compatibility of the heat source, storage and distribution. Resolve open drainage connections in the model.

Tests before handover

Document leak tightness, drainage flow, venting and heat-source performance. Obtain the records required for external works.

Reading this edition

The drawings describe the proposed design for both houses, which are offered together. Model dimensions require site verification.

Professional and municipal review

The appointed professionals must review the drawings. Technical signatures, filing references and municipal approval are outstanding.

Project presentation

EC-CHIA-001 · ColivingLiguria S.r.l. · 24 November 2026