

**The city of glass**

Altare glassworks renovation and development project

**CUSTOMER**

## **Altare**

### **The Ligurian home of glass**

Situated 398 metres above sea level and 14 km from the provincial capital of Savona, Altare has a population of 2,211, a surface area of 11.7 square kilometres, and a living density of 188.97 residents per square kilometre.

From Savona, the Cadibona state highway leads into the Bormida River Valley, an area teeming with history, culture and nature.

To enter the municipality of Altare, once owned by the marquis of Monferrato, visitors must travel under an 18<sup>th</sup>-century fortress built by Napoleon. The traditional and renowned glassmaking activities were introduced here around the 11<sup>th</sup>-12<sup>th</sup> centuries, according to tradition thanks to the efforts of the Benedictine monks in Bergeggi, utilising the skills of foreign (French and/or Flemish) craftsmen. Up to 1823, the area was regulated by the statutes of the University of Glass Art, a corporation founded in 1495 to safeguard and govern the profession of “master glassmaker”.

### **The origins of glass**

The history of the *Società Vetrai Altaresi* takes us back to the oldest origins of the combination of the production and work in the long tradition that evolved from *ancien régime* to market society. On the evening of Christmas 1856, 84 glassmakers from Altare formed an association, the S.A.V., considered the first example of an Italian industrial cooperative. Within the first few years of its inception, the association participated in the Industrial Exhibition of Savona in 1857, of Turin in 1858, where its products were awarded the silver medal, of Milan in 1871 and of Savona again in 1878.

The social conflict that emerged in 1904 focused more on moral economy and social power issues than just economic convenience. The strike that year marked the onset of the modern class struggle in which the Mazzinian tradition had already been widely replaced by the socialist movement.

1. view of the central courtyard and the immense central chimney
2. Altare Glass Museum

## Description of the complex

The industrial complex, located between XXV Aprile and via Cesio, consists of a group of compact structures around a spacious central courtyard surmounted by a towering brick chimney.

Two volumes, one facing piazza Vittorio Veneto and the other the railway station, consist of massive walls and wide apertures to aerate the interior spaces that housed the glass smelting furnaces.

Intermediate bodies link the entire structure and enclose it to prevent unauthorised personnel from entering the industrial production areas.

The central “L-shaped” part has Neo-classical architectural features as confirmed by the regular pattern of windows and facade cornices culminating in two moulded pediments with a typical nineteenth-century design. On via Cesio a long series of walled-in arcades divides the street from what was once the finished and packaged product warehouse.

The 17<sup>th</sup>-century vaulted areas under the areas facing via Cesio are the oldest part of the entire factory. The entire assembly is structurally sound thanks to the use of beams and small vaults for most of the horizontal structures.

Characteristic and original structural elements, such as the cast iron columns in the grinding department, are still present in some areas.

While much of the original wooden roof framework was replaced by steel parts after being damaged by several large fires, some large beautiful chestnut trusses still cover entire departments. Unfortunately, one of the most severely damaged areas is the *Sala degli Stemmi*, a room whose decorations, frescoes, coats-of-arms, sculptures, artefacts and furnishings chronicled the history of the founding families and the events of the glorious *Società Artistico Vetraria* over the last 3 centuries.

## New architecture within a historical context

Architectural activities are being focused on one of today’s most challenging and demanding fields: designing abandoned industrial complexes.

Such actions alter and turn the old architectural design methodology on its ear: architecture to produce objects, each defined within its own area and capable of conveying its own formal message, but all too often alone and isolated within its urban context.

The city is a space consisting of relationships and encounters and quite often throughout our history the name of a site evokes the image of an entire city.

Building on what has already been built is the field of experimentation and planning feasibility that encompasses the specific project.

Co-existence of past and present is the main objective of the *Società Artistico Vetraria* site renovation project. With this in mind, the project develops according to a logical scheme based on the protection and evolution of industrial archaeology centres: to ensure that what has been obliterated over time and by time will re-emerge, restoring the unity and vitality of the architectural object by focusing on and enhancing the value of its original and distinctive features.

In order to renew the functions of the entire complex, new design activities tend to create a space that satisfies today’s needs by bringing out the essential features and material characteristics forming the structural physicality.

The project is research on an environmental system in which the public can utilise the various sectors of the complex thanks to a continuous series of access points and paths.

A real “citadel” of residential excellence, distinguished by a number of services and linked public and private functions that enhance the value and ensure the direct involvement of and even transform the social context of the site.

3/4. view of the glass production furnaces

## **Project contents**

In this project new functions compatible with the abandoned industrial complex will be introduced through the use of renovation methods that will not distort the original architectural design, thereby enhancing its value through a less intensive use of spaces that is certainly more suitable for the historic urban centre. Such interventions include the general cleaning of appendages and the lightening of some secondary portions to improve the complex's overall relationship with the site, making it easier to utilise by future users.

The construction consists of a set of five main buildings interconnected by secondary structures that horizontally and vertically link the various sectors and buildings situated around a main courtyard. The courtyard will become the city's new public square where the new activities will be developed. The historical brick chimney rises in the centre of this space and will remain a highly distinctive feature visible both indoors and outdoors.

The plans also call for the construction of a new town hall in the areas adjacent to the chimney on the ground floor, where it will occupy a total surface area of about six hundred square metres.

The variation includes the installation of residences, offices, business spaces, a small hotel with restaurant and a wellness centre, in addition to public spaces and parking areas.

The two main factory buildings facing via XXV Aprile once housed the glass production furnaces. Since the interior of these building shells, which will maintain their original style, is completely empty, housing and parking lots will be installed on the ground floors.

This creates a special dialogue between the massive original walls with large arches and the new curtain wall, recessed by more than two metres, creating a sequence of loggia galleries to be used by the residential units.

5. view of the polishing department

6. view of the grinding department

Loggia galleries and terraces will be equipped with sliding brise-soleil (sun breakers) to provide protection against the summer heat.

The two constructions are presently connected by a low-rise building that extends longitudinally, closing the front facing the inner courtyard.

In the centre, a wide passage protected by a full-panelled gate allowed people and vehicles to access the glassworks directly from via XXV Aprile. Presently, the building is totally degraded and statically unsafe. In fact, the roof collapsed onto the underlying floors where rain and snow have caused irreversible damage for more than a decade.

Therefore, the project includes the demolition and replacement of this structure with a new building including underground parking lots. Business areas will be created facing both the roadway and the inner square on the street level, while residences will be built on the two upper levels. The new building will be built on top of the old one but at the right and left ends, near the closed areas that once housed the furnaces. The building is recessed in such a way to create connections or better yet openings with respect to the facing area that will be urbanized and, above all, toward the central piazza Vittorio Veneto, the main centre of Altare with public and private businesses.

The perimeter of the square-courtyard consists of a long nineteenth-century building with gables and mouldings typical of the period, in addition to the original coats-of-arms of the *Società Artistico Vetraria*.

The hotel and a limited number of residences will be housed in this building. The roof will be renovated and raised in order to utilise the entire attic floor.

The fronts with their original features will remain while some inappropriate additions, built in the past to adapt the structure designed for handmade glass activities to the industrial production techniques that no longer matched the original factory layout, will be eliminated.

7/8. views of the pavilion that housed the glass production furnace

Attractive, high-quality areas, to be annexed to the hotel, with their distinctive cast-iron column structural supports, will be built on the first floor.

A long building with walled-in arches to ensure that the former work areas remain separate from via Cesio, will be connected to the main street in the historic centre of Altare.

Because this protective function is no longer required, the arches will be reopened to enhance the value of the architectural façade, thus upgrading the entire street system, which will expand toward a new commercial front that incorporates the upper residential level.

This will allow pedestrians to access the new area through the open arcade, to utilise the new commercial spaces and, thanks to a spacious open-air connection created by eliminating roof additions, to go down one level to the square-courtyard by using a system of staircases and lifts.

The re-use of the intermediate connection between the nineteenth-century building and the construction on via Cesio, in addition to linking the two main levels, also aerates and provides light to all the prestigious vaulted basement areas that will be used for businesses.

The small buildings on the lower part of via Cesio, some of which have collapsed and have been seriously damaged, will be eliminated to create green areas and parking to meet urban planning standards.

This sector includes a second chimney that, like the main one, was lowered after the furnace was shut down for safety reasons. Based on this new project, the chimney will be raised using materials appropriate for this characteristic construction that in fact will be utilised as a flue for the new, adjacent heating system that will manage the entire complex.

9. view of the inner courtyard

10. view of the glass production furnace

City of Altare – PROVINCE OF SAVONA

PUBLIC PARKING  
BUSINESS AREA  
SPA - WELLNESS CENTRE  
TECHNICAL ROOMS  
PRIVATE PARKING  
HOTEL - RESTAURANT  
STORAGE ROOMS  
RESIDENTIAL AREA  
PUBLIC SPACES  
TOWN HALL

UNDERGROUND LEVEL PLAN  
Scale 1:500

UNDERGROUND LEVEL FUNCTIONAL DIAGRAM

**BASEMENT LEVEL PLAN**

Scale 1:500

**BASEMENT LEVEL FUNCTIONAL DIAGRAM**

INTERMEDIATE LEVEL PLAN

Scale 1:500

INTERMEDIATE LEVEL FUNCTIONAL DIAGRAM

GROUND FLOOR PLAN

Scale 1:500

GROUND FLOOR FUNCTIONAL DIAGRAM

FIRST FLOOR PLAN

Scale 1:500

FIRST FLOOR FUNCTIONAL DIAGRAM

SECOND FLOOR PLAN

Scale 1:500

SECOND FLOOR FUNCTIONAL DIAGRAM

THIRD FLOOR PLAN

Scale 1:500

THIRD FLOOR FUNCTIONAL DIAGRAM

FOURTH FLOOR PLAN

Scale 1:500

FOURTH FLOOR FUNCTIONAL DIAGRAM

FIFTH FLOOR PLAN

Scale 1:500

FIFTH FLOOR FUNCTIONAL DIAGRAM

ROOF PLAN

Scale 1:500

SECTION 1 – SECTION 2  
Scale 1:500

SECTION 3 – SECTION 4  
Scale 1:500

## STANDARD APARTMENTS

PROJECT DATA

Sub - area B2 AV		
<b>USEABLE SURFACE AREA</b>		
Residences and annexed services		9, 580.10
Businesses / Services		2,114.46
Hotel + Restaurant		1,808.94
SPA Wellness Centre		342.81
<b>TOTAL</b>		13,846.31
<b>ALLOCATED SURFACE AREA</b>		
Storage rooms		619.47
Heating system and Equipment room		154.87
Allocated parking Intermediate level		2,324.30
Stairwells		1,850.53
Balconies		1,511.01
Canopy roofing		22.23
Inspection passages		67.02
<b>TOTAL</b>		6,549.43
<b>Allocated Parking excluded from Allocated Surface Area</b>		
Allocated Parking areas Basement level		2,278.43
Underground parking (31 spaces)		840.93
<b>TOTAL</b>		2,278.43
<b>STANDARD SPACES</b>		
Public spaces (square+porticos)		2,664.76
Public parking via Cesio		1,319.41
Parking outside the area		285.86
Parking inside the area (small road)		183.99
Town hall		676.75
<b>TOTAL</b>		5,130.77