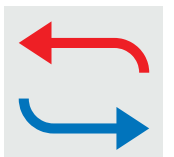




PROJECT

Rarity Cellar
Winery Van Volxem
Wiltingen/Saarland

GRAVIVENT
Silent gravity cooling





RARITY CELLAR

Winery Van Volxem

Wiltingen/Saarland

ARCHITECT | ENGINEER

arch.tv Trojer Vonmetz, Terlan bei Bozen (I) | HVL GmbH, Föhren

GRAVIVENT®

Silent gravity cooling

Modern castle tower

Whilst the original Van Volxem estate is situated in the historic centre of Wiltingen, the wine cellar was built a few years ago in the heart of the estate's vineyards. Ever since, the monolithic building has stood proudly on the Wiltinger Schlossberg, like a modern castle tower.

The exterior is entirely clad in travertine, whilst the cellars are built of gneiss. This is a nod to the vineyard walls typical of the Moselle region, but also a modern interpretation of classic vaulted cellars.

The centrepiece is the rare wines cellar, featuring stainless-steel tanks recessed into the walls and large wooden barrels in which wines from the "Große Lagen" (premium vineyards) mature. A consistent – and consistently cool – indoor climate is essential for maturation. This is ensured by the installation of the GraviVent® silent gravity cooling system.

A total of 12 high-performance cooling convectors have been concealed behind the stainless-steel tanks; air enters the duct at 18 °C at the top and exits at 13 °C at the bottom. When the doors are open, even the adjacent wooden barrel cellar benefits from the cooling.



RARITY CELLAR

Winery Van Volxem

Wiltingen/Saarland

GRAVIVENT® – SILENT GRAVITY COOLING

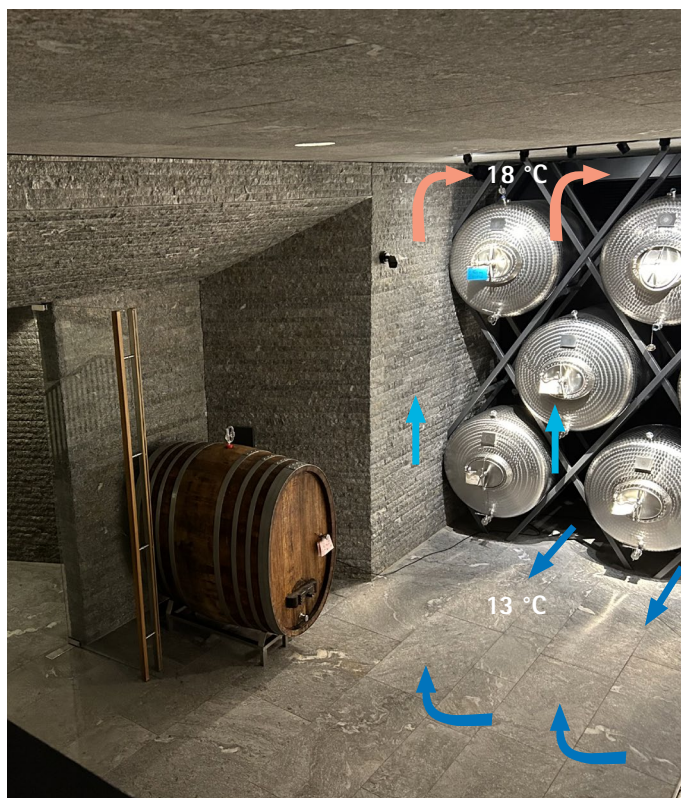
Silent gravity cooling for wine cellars

AIR CON SYSTEM DESIGN



GraviVent®

- 12 cooling units type AISI-W 18.51, 1800x510x150 mm [LxHxW], high-performance cooling convectors with condensate tray and drain
- Room temperature 18 °C
Cold water inlet 6 °C
Cold water outlet 10 °C
Temperature difference 10K
Active duct height 3678 mm
Cooling capacity per unit 1000 W



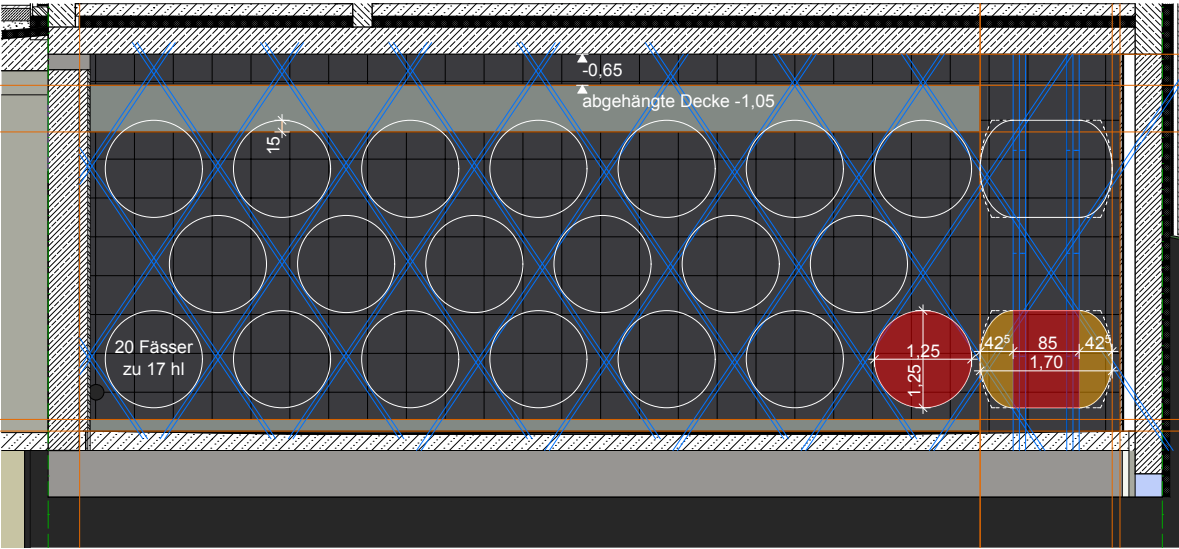
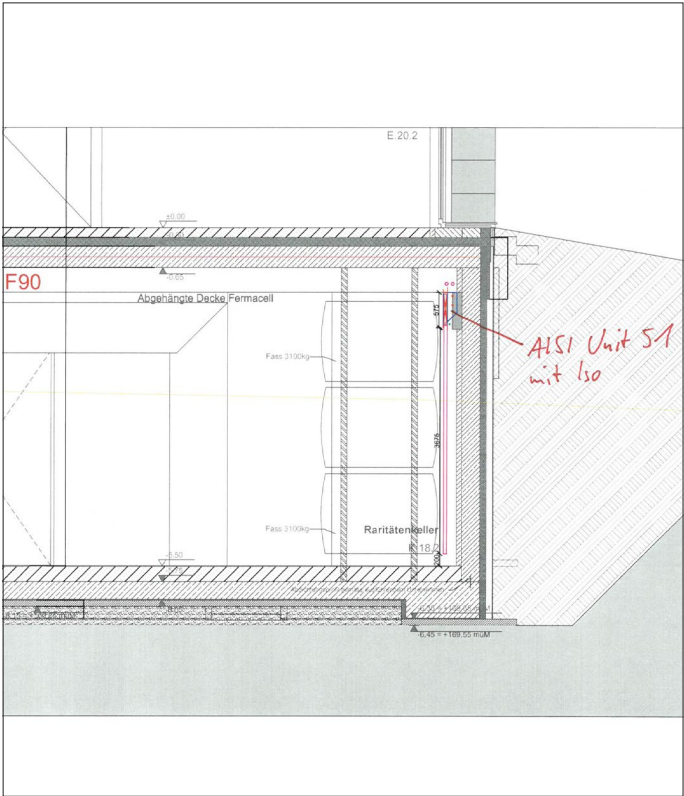
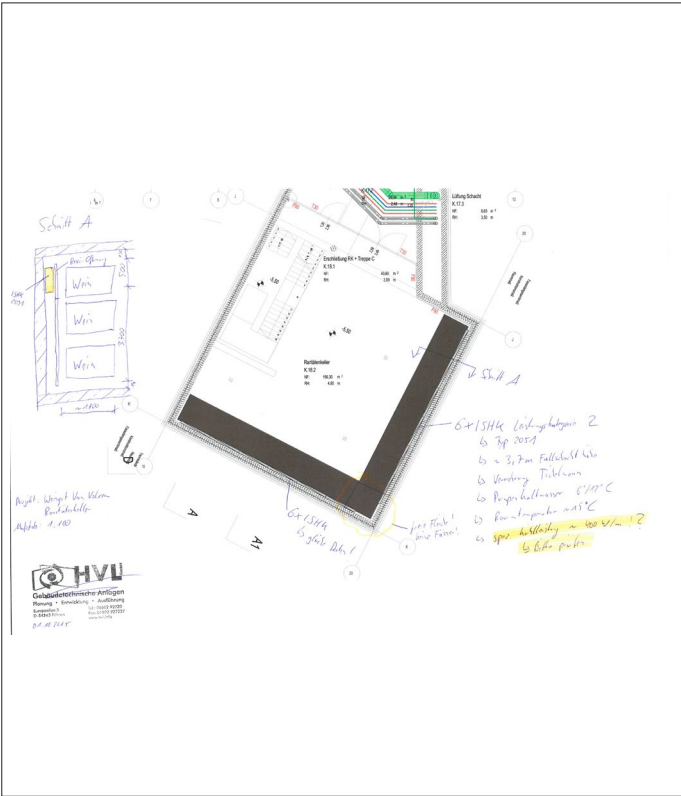
RARITY CELLAR

Winery Van Volxem

Wiltingen/Saarland

GRAVIVENT® – STILLE SCHWERKRAFTKÜHLUNG
Technische Zeichnungen

AIR CON SYSTEM DESIGN





TTC Timmler Technology

Designing innovative solutions for new buildings and redevelopment together with architects and planners

Developing object specific solutions together with architects and specialist planners already during the planning phase is the strength of TTC Timmler Technology.

TTC provides smart building technology for contemporary living and working environments: LED light design, innovative air-conditioning systems, design-oriented façade elements and grating systems for interior and exterior areas.

With our extensive know-how we can balance modern design, energy efficiency, and economic efficiency. We design customized complete solutions in accordance with technical specifications, either made from standard components or made to your individual requirements.



Green and economical

People and environment are at the heart of all our endeavours. We develop natural airconditioning systems to go easy on resources and to save costs.

Multi-functionality Our know-how for your planning

Multi-functionality is a special strength of TTC building technology. Below a few examples:

- LED Light Design – TTC lighting elements can be combined with channels and gratings as well as maintenance platforms, using striking illuminations to show your architecture in the best light. TTC light design offers a variety of options: From façade illumination with SpaceLights, high brightness LEDs, LED light lines and light tiles to wall washers – with our large choice of materials and individual design we can provide a customized solution for your project.
- TTC GraviVent® can be used to provide a consistent climate within a building. Energy-efficient, making use of natural gravity.
- TTC Chilled Beams ensure comfortable, silent ventilation in a wide variety of working environments. In consultation with architects and planners they can be individually fitted into the ceiling design.
- TTC Floorunits with a variety of functions such as heating, cooling, ventilation combine design with functionality and energy efficiency without disturbing the look of, for example, room height glass façades.
- Homogeneous grating systems create seamless transitions from the interior to the exterior on glass façades. TTC Floorunits provide heating, cooling and ventilation for interior areas and complement the TTC façade draining systems for exterior areas.

TTC Timmler Technology GmbH

Christian-Schäfer-Str. 8 | D-53881 Flammersheim
Tel +49 2255 921-0 | Fax +49 2255 921-500
info@ttc-technology.eu | www.ttc-technology.eu

