

WINE CELLAR COOLING SYSTEM TYPES

Self-Contained vs. Split vs. Ducted

How to choose a wine cellar cooling system: the engineering criteria that matter, with WhisperKOOL specifications side by side.

01

Self-Contained

Through-the-wall · all-in-one

CELLAR ADJ. ROOM

Evaporator and compressor in one chassis. Cools the cellar and exhausts heat into the room behind the wall.

02

Split System

Evaporator inside · condenser outside

CELLAR OUTDOORS

The compressor leaves the building envelope. Refrigerant lines connect the two halves, so the cellar stays quiet.

03

Ducted

Equipment hidden · air delivered by duct

CELLAR · GRILLES ONLY

The unit lives in an attic, closet or mechanical room. Supply and return ducts leave only grilles in the cellar.

COMPARISON MATRIX

CRITERION	SELF-CONTAINED	SPLIT SYSTEM	DUCTED
WHERE HEAT GOES	Room behind the cellar wall	Outdoors, via remote condenser	Attic / utility room, or outdoors
REMOTE DISTANCE	None — sits in the wall	Condenser up to 100 line-ft	Up to 25 duct-ft (+100 line-ft on splits)
HEAT-SIDE LIMIT	SC PRO / Slimline LS: 85°F intake Extreme: 110°F intake	Outdoor condenser rated from -20°F	Phantom & Extreme tiR: 110°F intake
IN-CELLAR SOUND	Compressor in the wall	Evaporator as low as 48 dBA	Quietest — ducted Platinum evaporator ~42 dBA
VISIBILITY	Grille in cellar wall	Evaporator on wall or ceiling	Supply & return grilles only
INSTALLER	Some models DIY-installable	Licensed HVAC-R technician	Licensed HVAC-R technician
POWER	115V dedicated circuit	120V evaporator + 110V or 220V condenser	115V (fully ducted) or split electrical
CAPACITY	1,453–6,131 BTU/h	1,666–10,268 BTU/h sensible	2,688–6,025 BTU/h (self-contained) to 21,519 BTU/h sensible (Quantum Twin)
RATED CELLAR SIZE	300–2,000 cu. ft.	500–3,000 cu. ft.	800–4,000 cu. ft.
WARRANTY	2-yr limited + 5-yr compressor	2-yr limited · activated by Warranty Checklist	Follows self-contained or split terms
WHISPERKOOL SERIES	SC PRO · Slimline LS · Extreme ti/tiR	Platinum Split · Ceiling Mount · Blow-Through	Phantom · Extreme tiR · Platinum Split Ducted · Quantum · Blow-Through

THE WINE SCIENCE BEHIND THE SPEC

55°F

Industry-standard storage temperature. A steady 58°F beats a cellar swinging 50–65°F.

WHISPERKOOL

50–70%

Relative humidity that keeps corks sealed without inviting mold.

WHISPERKOOL

R-13+

Minimum insulation for interior walls. Rated cellar sizes assume R-19 and a warm-side vapor barrier.

WHISPERKOOL · STORE SPEC PAGES

4×

Faster chemical development in house-stored wine vs. cellar-stored, over two years.

ARAPITSAS ET AL., METABOLOMICS, 2014

CHOOSE BY WHERE THE HEAT GOES

IF THE ROOM BEHIND IS

Conditioned & under 85°F

→ **Self-contained**
SC PRO · Slimline LS

IF THE ROOM BEHIND IS

A garage or warm space, up to 110°F

→ **High-ambient self-contained**
Extreme ti/tiR

IF YOU NEED

Silence, or there's no adjacent room

→ **Split system**
Platinum Split · Ceiling Mount

IF THE DESIGN MUST BE

Invisible — soffits, millwork, glass

→ **Ducted**
Phantom · Platinum Ducted · Blow-Through

THE 78°F RULE

Cooling-unit exhaust commonly reaches 90–100°F. If a self-contained unit would vent into a space that stays at 78°F or higher, WhisperKOOL recommends an Extreme Series unit or a split system.

SIZE BY HEAT LOAD

Cubic footage alone ignores glass, masonry, ambient temperature and door traffic. Every BTU rating is theoretical — confirm with a heat-load calculation before you order.

Specifications from WhisperKOOL product pages and spec sheets as listed on winecellarcoolingunits.com (September 2026). BTU/h rated at 85°F condenser air intake; split-system figures are sensible capacity with the 220V H.E. condenser. Sound levels from WhisperKOOL spec sheets, measured at 6 ft. WhisperKOOL is a trademark of its owner; WineCellarCoolingUnits.com is an independent authorized dealer.