

VONTZ CENTER

📍 Cincinnati, OH

CHALLENGE

Create Gehry's signature sculptural forms using brick

RESULTS

Volumetric forms created and construction cost decreased

BRICK SIZES

Structural Brick, Atlas® 4x4x12
Custom Shape, Sloped Sill 4x4x8
Face Brick, Utility 4x4x12
Paver, Modular 4x4x8

BRICK COLOR

Park Rose, Smooth Texture

PANELIZER

Vet-O-Vitz Masonry Systems, Inc.

ARCHITECT

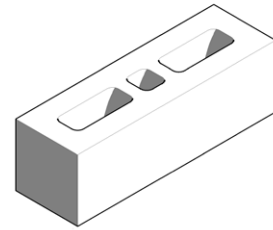
Frank O. Gehry & Associates Inc. in association with BHDP Architecture

How Panelized Brick Created Organic Forms While Reducing Construction Costs

The Vontz Center for Molecular Studies, a Frank Gehry design, serves as the gateway to the University of Cincinnati, medical campus. The design of the research building is stunning and the work taking place in its laboratories is transforming fundamental biomedical understanding.

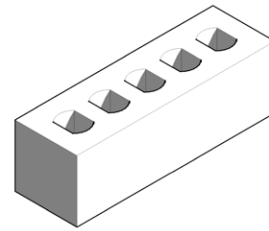
CHALLENGE

Gehry's vision for the Vontz Center included his signature swooping sculptural forms but instead of using a reflective surface like most of his work, he chose brick. The use of brick would unify the building with the existing medical buildings, but how do you create curved walls using brick?



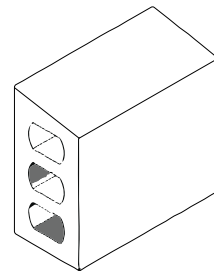
**Structural Brick, Atlas™
4x4x12**

The large cores allow this brick to be reinforced and built into panels.



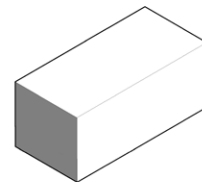
Utility 4x4x12

A face brick for site walls and non-panelized areas.



Custom Sloped Sill 4x4x8

To make the transition from the vertical wall to sloped roof.



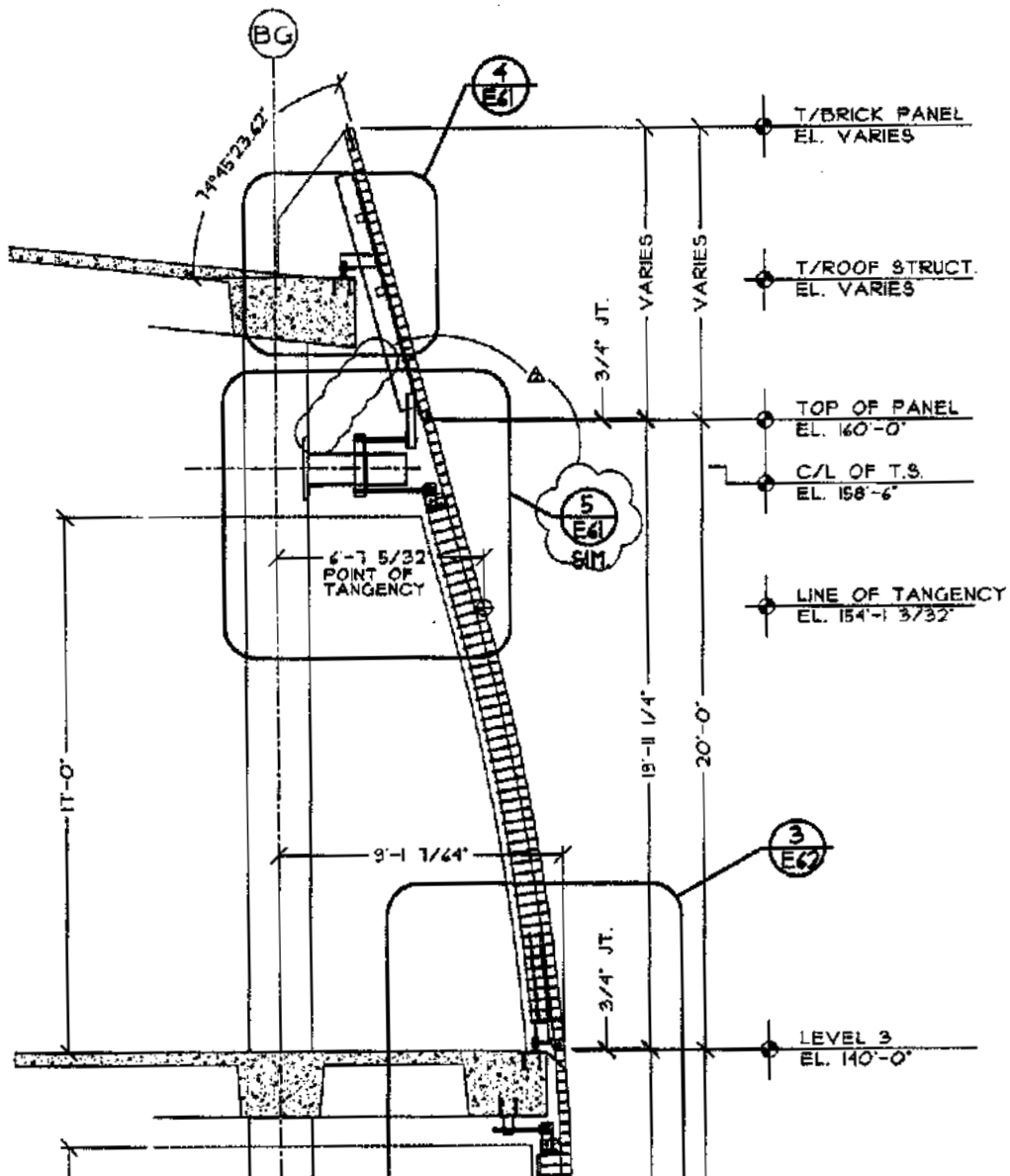
Modular 4x4x8

A solid paver unit caps the top of the site walls.

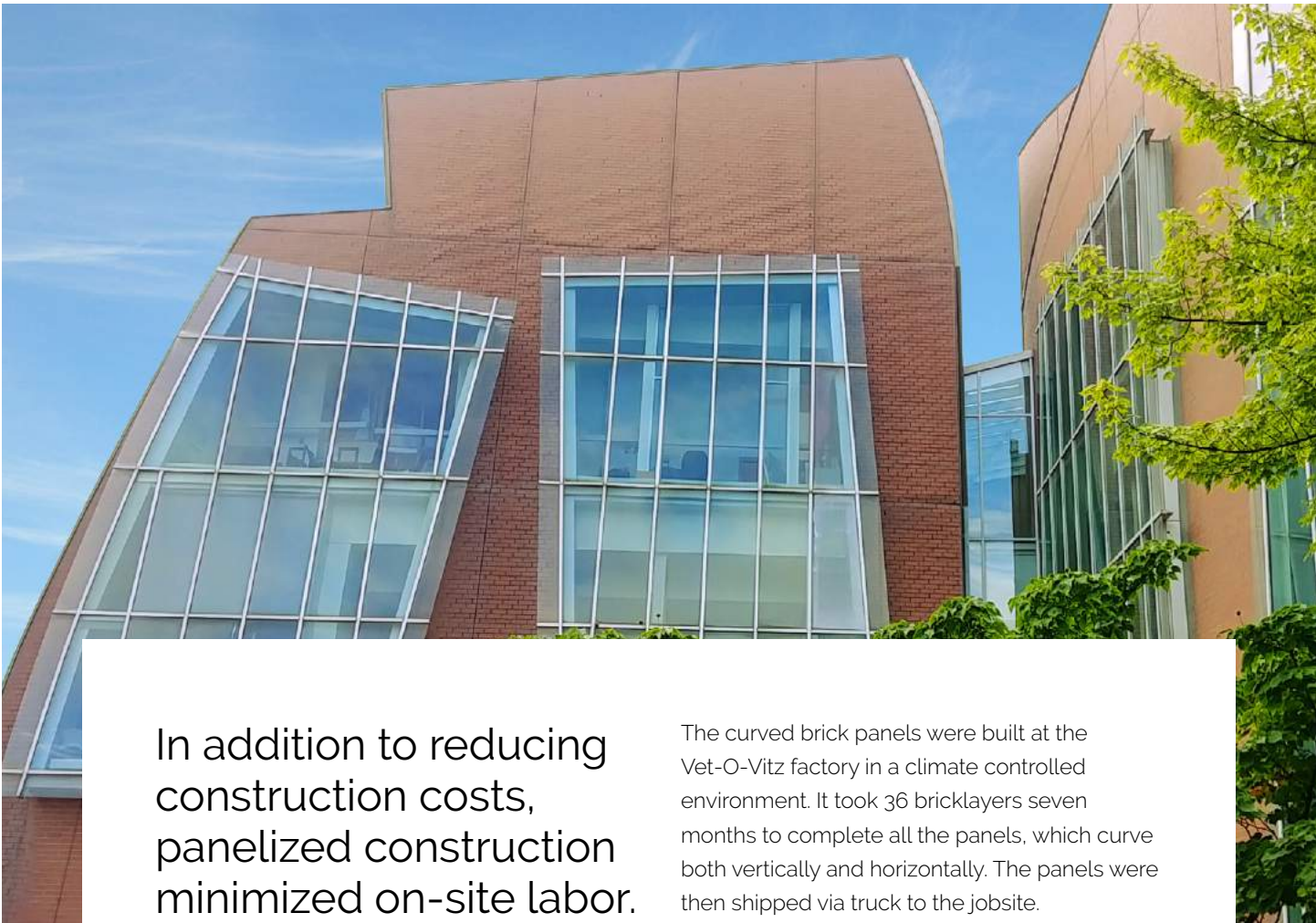
CREATE CURVES
 You can create curves using structural brick.

Who Said Brick Walls Have To Be Straight?

Frank Gehry brought his design to Interstate® Brick and asked if it could be done with brick. We said "Yes". Try doing this with regular cored brick. Structural hollow cores allow for reinforcing, thereby enabling out of plane solutions.



wall section cut through structural brick panel



In addition to reducing construction costs, panelized construction minimized on-site labor.

The curved brick panels were built at the Vet-O-Vitz factory in a climate controlled environment. It took 36 bricklayers seven months to complete all the panels, which curve both vertically and horizontally. The panels were then shipped via truck to the jobsite.

SOLUTION

To accomplish the distinctive curved brickwork, an Atlas® 4x4x12 structural brick was used to create 375 curved brick panels, some up to 29 feet high and almost every one different in some way. Atlas® has large hollow cores that allow the brick to be reinforced. This offers many design options such as the out of plane solutions needed for this innovative design.

For site walls and non-panelized areas a Utility 4x4x12 brick was used and solid walls were capped with modular 4x4x8 pavers. To make the transition from the vertical walls to the sloped roof, Interstate® Brick created a custom 4x4x8 sloped sill shape.

RESULTS

By using Atlas® structural brick and panelized construction, Gehry's vision for curving brick walls was realized.

The Atlas® brick complex curved panels were fabricated without the need for expensive falsework and shoring that would be necessary for laid in-place masonry. The use of panelized construction helped reduce construction costs by shortening the schedule and minimizing on-site labor by eliminating the need for scaffolding and storing large amounts of masonry on the job.

Have questions? [Talk to one of our consultants](#), visit interstatebrick.com or call [1-800-233-8654](tel:1-800-233-8654).