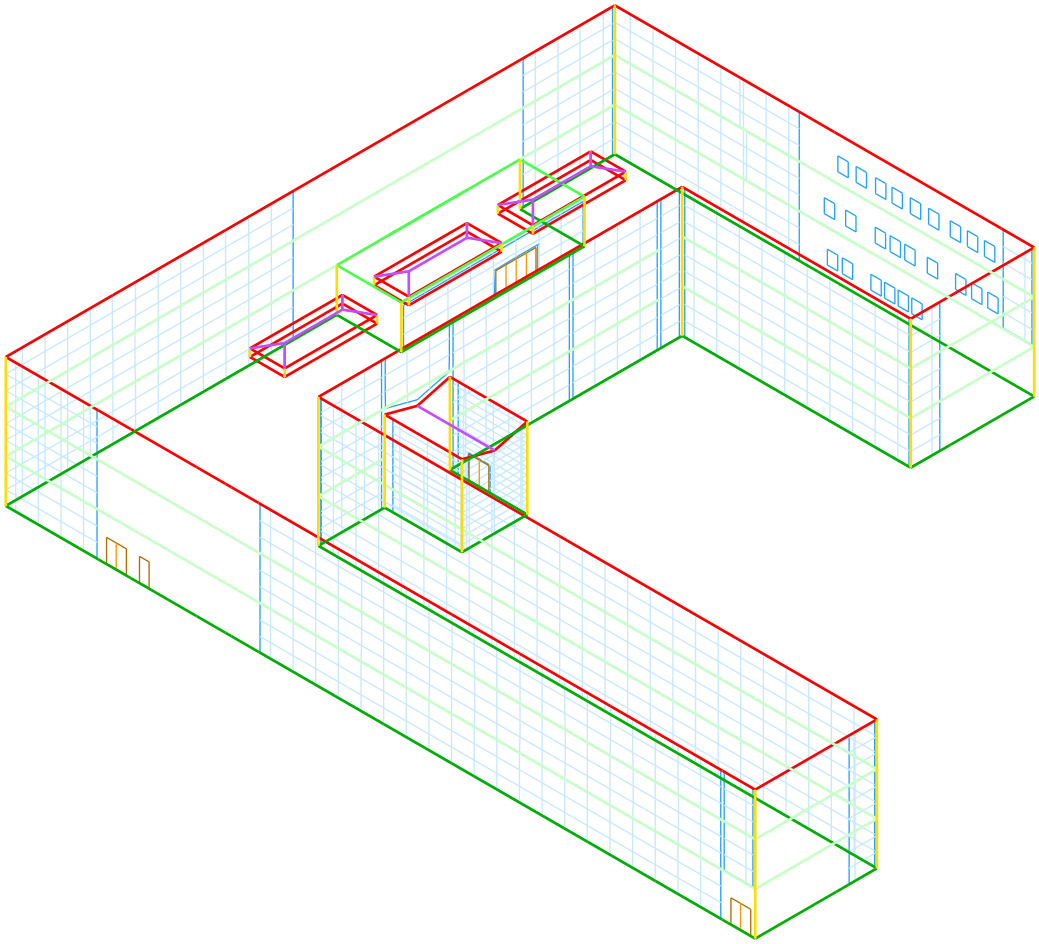
Thermal Bridging Quantity Takeoff

Date created: November 07, 2025



Pollination

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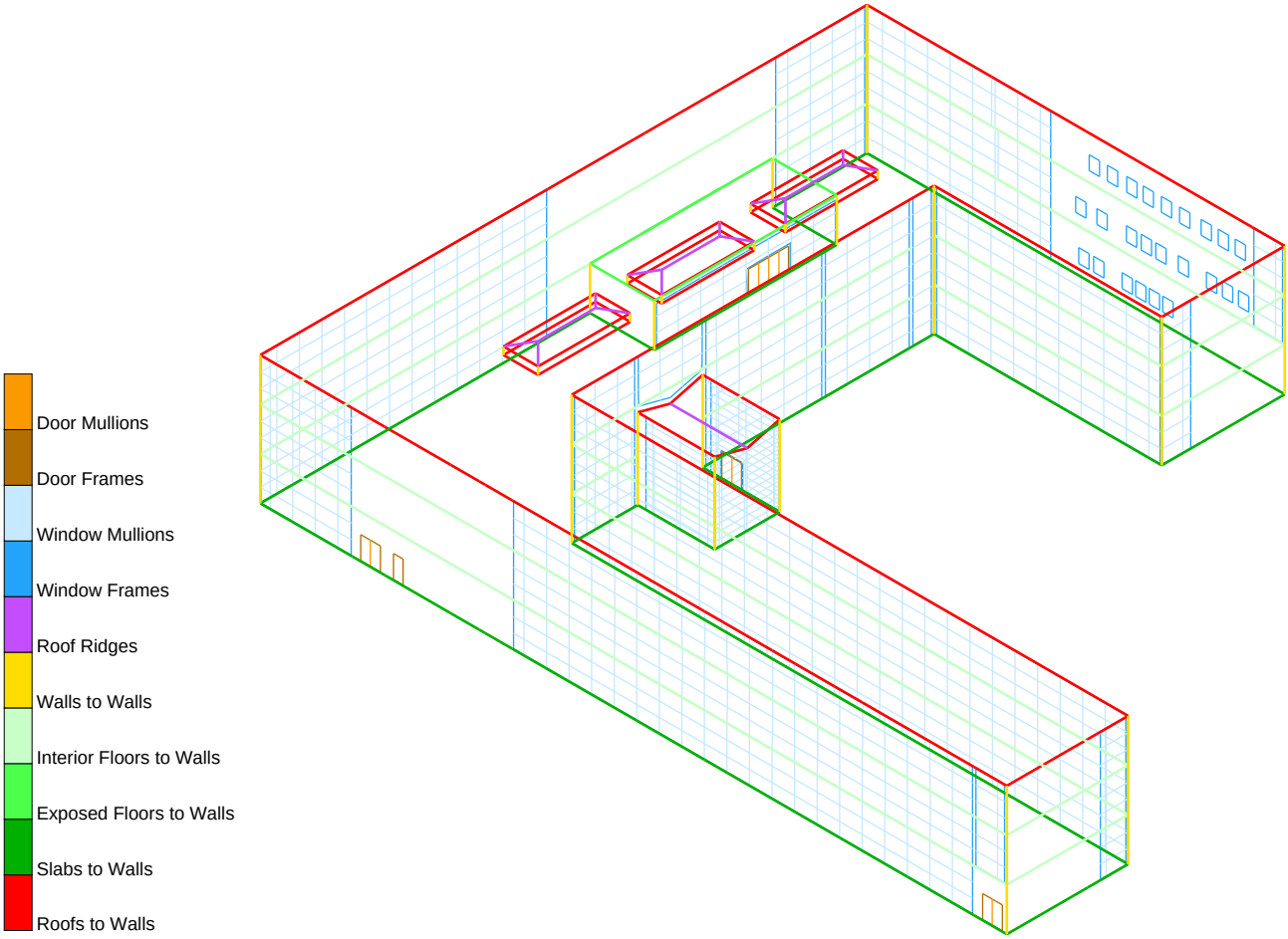
Summary

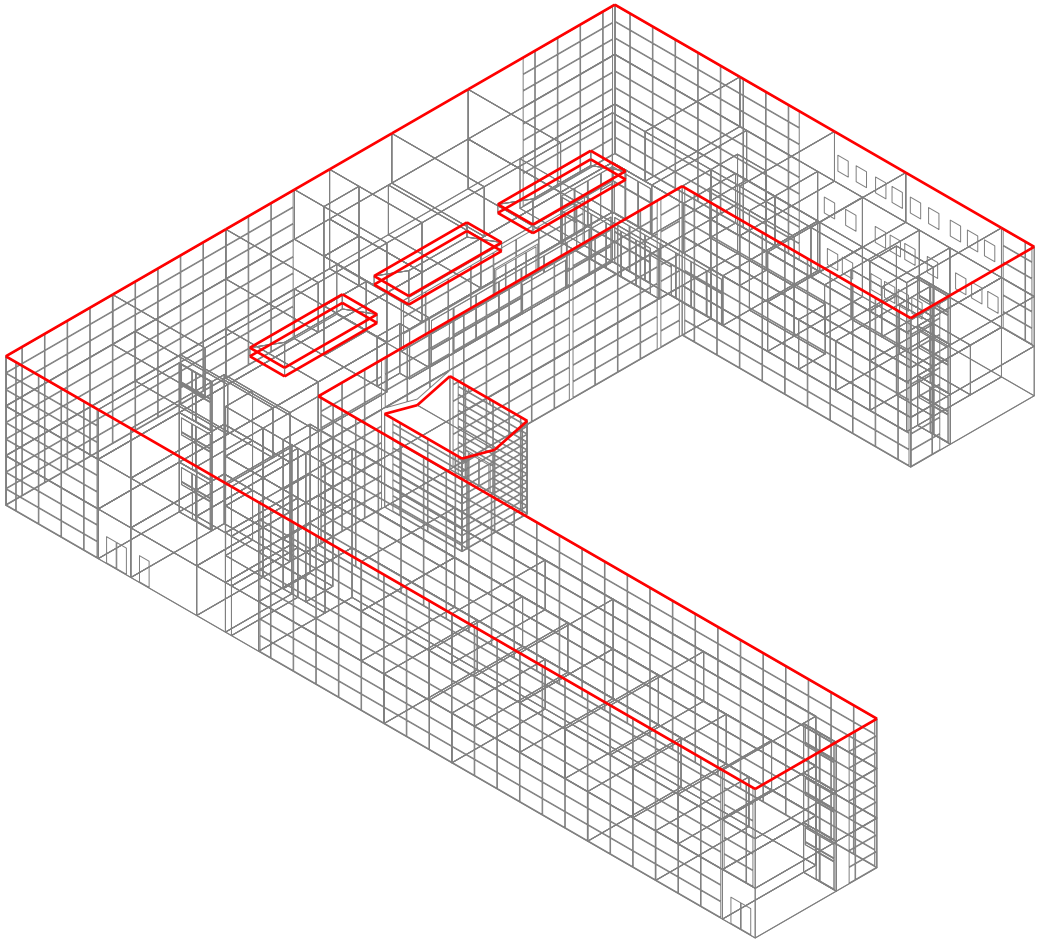
Thermal Bridge Type	Value	Description
Roofs to Walls	441.28 m	The total length of junctions where roof assemblies meet exterior walls (or, in rare cases, exposed floor plates). These edges are frequently associated with thermal bridges due to structural connections for parapets or connections between sloped roof structure and vertical walls.
Slabs to Walls	305.51 m	The total length of junctions where ground floor slabs meet exterior walls (or, in rare cases, roofs). These cases often involve thermal bridges to both the exterior air and the ground. In the most extreme cases, bridges can result from of a lack of thermal breaks for footings along the perimeter of a slab. However, just the simple connection of the slab to the exterior wall structure is often enough to result in heat leakage across an otherwise continuously insulated envelope.
Exposed Floors to Walls	50.81 m	The total length of junctions where exposed floor structures connect with exterior walls. These junctions often occur in cantilevered cases where a room overhangs an entryway or other outdoor space. They can be sources of thermal bridges if insulation under the exposed floor slab is not well connected to that of the exterior walls.
Interior Floors to Walls	538.81 m	The total length of junctions where interior floor structures meet exterior walls. It is sometimes possible to avoid significant thermal bridging in these cases by keeping all structure that supports the floor plate on the inside of the wall insulation. However, this may not be possible when floor slabs extend into outdoor balconies or parts of the exterior facade require significant structural support (eg. shelf angles supporting masonry veneer).
Walls to Walls	142.75 m	The total length of junctions where two exterior walls intersect. These linear details include corners and wall returns, which are common regions of heat transfer when not properly detailed.
Roof Ridges	48.75 m	The total length of junctions along roof ridge lines where two sloped roof planes meet. These details often involve complex insulation geometry, making them susceptible to heat leakage if not carefully designed.
Underground	0.00 m	The total length of junctions completely below grade. Most commonly, these cases represent fully underground basement walls meeting underground slabs. However, rarer cases like underground ceilings of bunker-like rooms meeting below-grade walls will also be highlighted in this group. Much like slabs on grade, these transitions can result in significant heat leakage to the soil particularly when the structure of slabs or walls connects to uninsulated footings or piles.
Window Frames	1125.34 m	The total perimeter length of the edges where windows and skylights meet the exterior walls or roofs that support them. Frames usually have an adverse impact on the overall window assembly U-value, particularly when conductive frame materials like aluminum or steel are used. They can also degrade the insulation of surrounding walls or roofs, particularly when thermal breaks in the frame do not align with exterior wall or roof insulation.
Window Mullions	3007.57 m	The total length of vertical and horizontal mullions that divide adjacent glazing units. Mullions are typically more conductive than surrounding insulated glass therefore can increase the overall glazing heat flow and assembly U-value.
Door Frames	39.30 m	The total linear length where door frames connect with surrounding wall assemblies. Similar to window frames, proper detailing and the use of thermal breaks are essential to maintain insulation continuity in these junctions.
Door Mullions	12.00 m	The total length of vertical mullion members dividing adjacent doors from one another. While relatively uncommon and comparatively small to the bridging that happens across a whole building, these cases can add up to a significant amount of heat flow for lobbies and assembly areas where multiple doors are often placed next to one another to ensure adequate egress.


Door Mullions
Door Frames
Window Mullions
Window Frames
Roof Ridges
Walls to Walls
Interior Floors to Walls
Exposed Floors to Walls
Slabs to Walls
Roofs to Walls

Roofs to Walls

The total length of junctions where roof assemblies meet exterior walls (or, in rare cases, exposed floor plates). These edges are frequently associated with thermal bridges due to structural connections for parapets or connections between sloped roof structure and vertical walls.

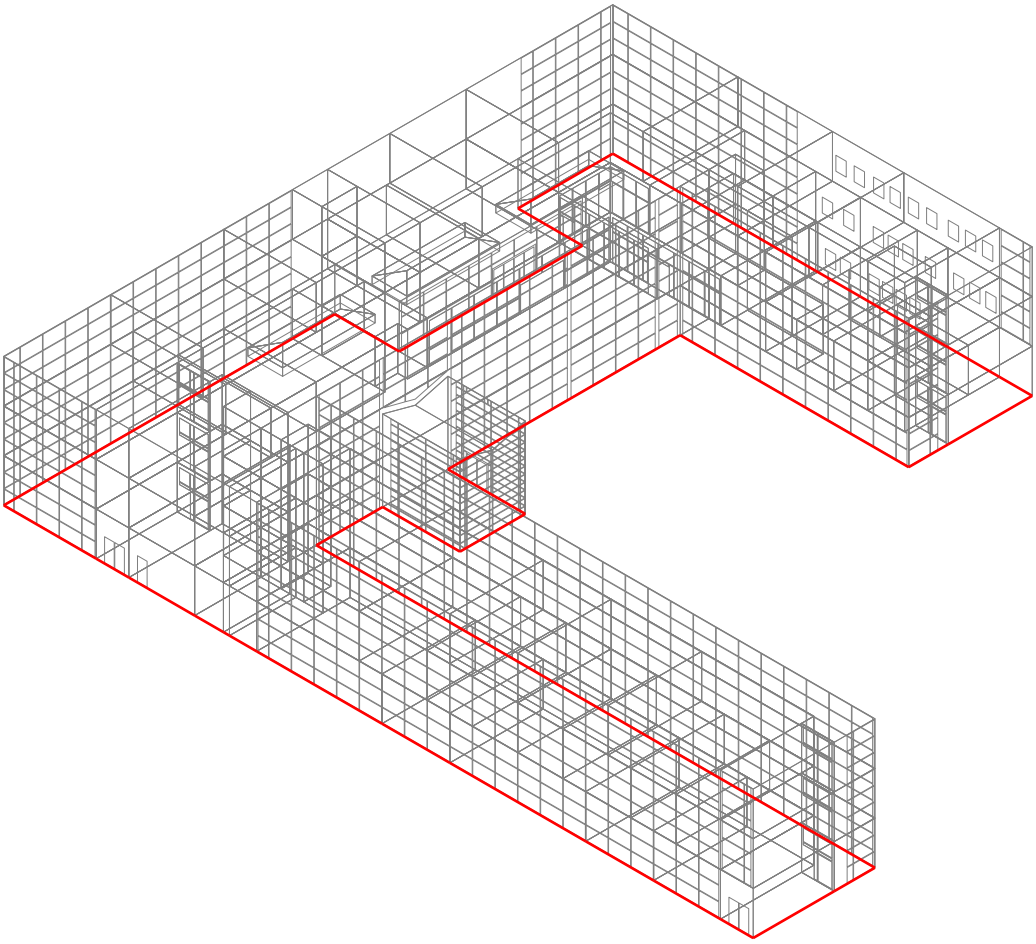
The total length of roofs to walls thermal bridges is **441.28 m**.



Slabs to Walls

The total length of junctions where ground floor slabs meet exterior walls (or, in rare cases, roofs). These cases often involve thermal bridges to both the exterior air and the ground. In the most extreme cases, bridges can result from of a lack of thermal breaks for footings along the perimeter of a slab. However, just the simple connection of the slab to the exterior wall structure is often enough to result in heat leakage across an otherwise continuously insulated envelope.

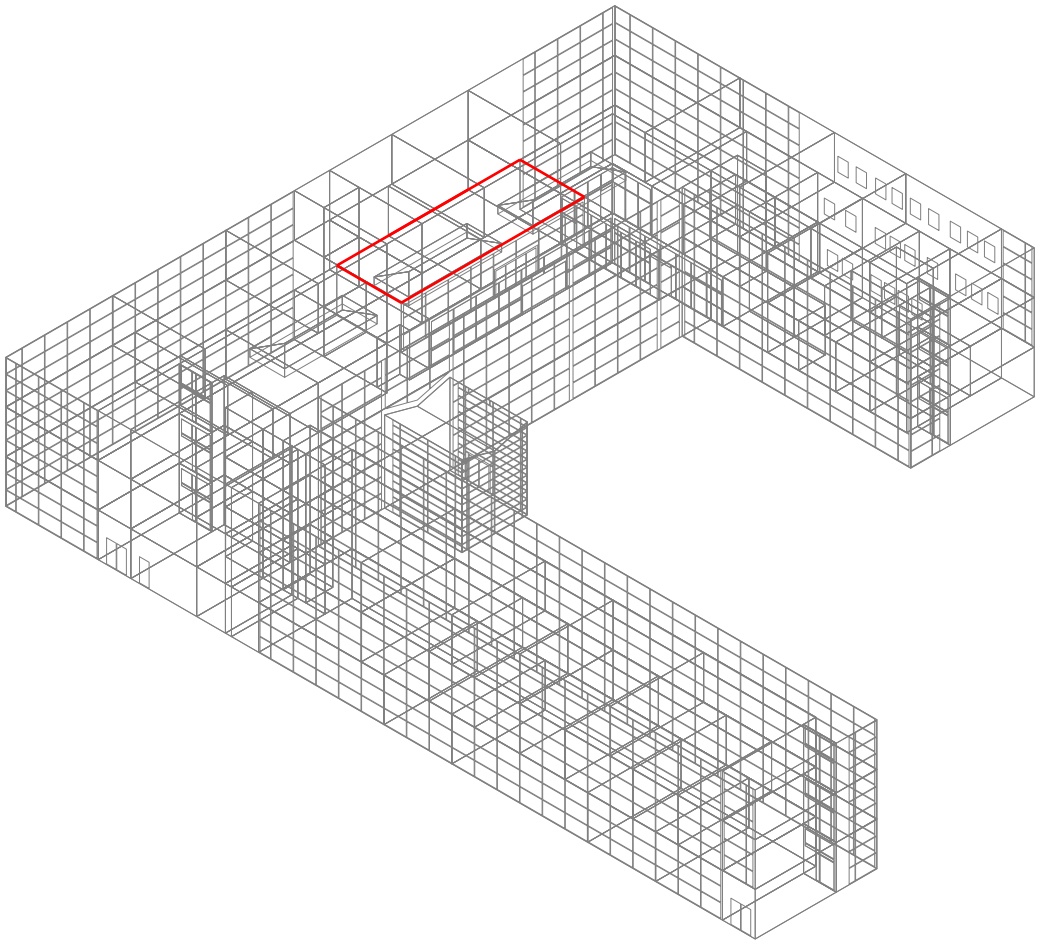
The total length of slab-to-wall thermal bridges is **305.51 m**.



Exposed Floors to Walls

The total length of junctions where exposed floor structures connect with exterior walls. These junctions often occur in cantilevered cases where a room overhangs an entryway or other outdoor space. They can be sources of thermal bridges if insulation under the exposed floor slab is not well connected to that of the exterior walls.

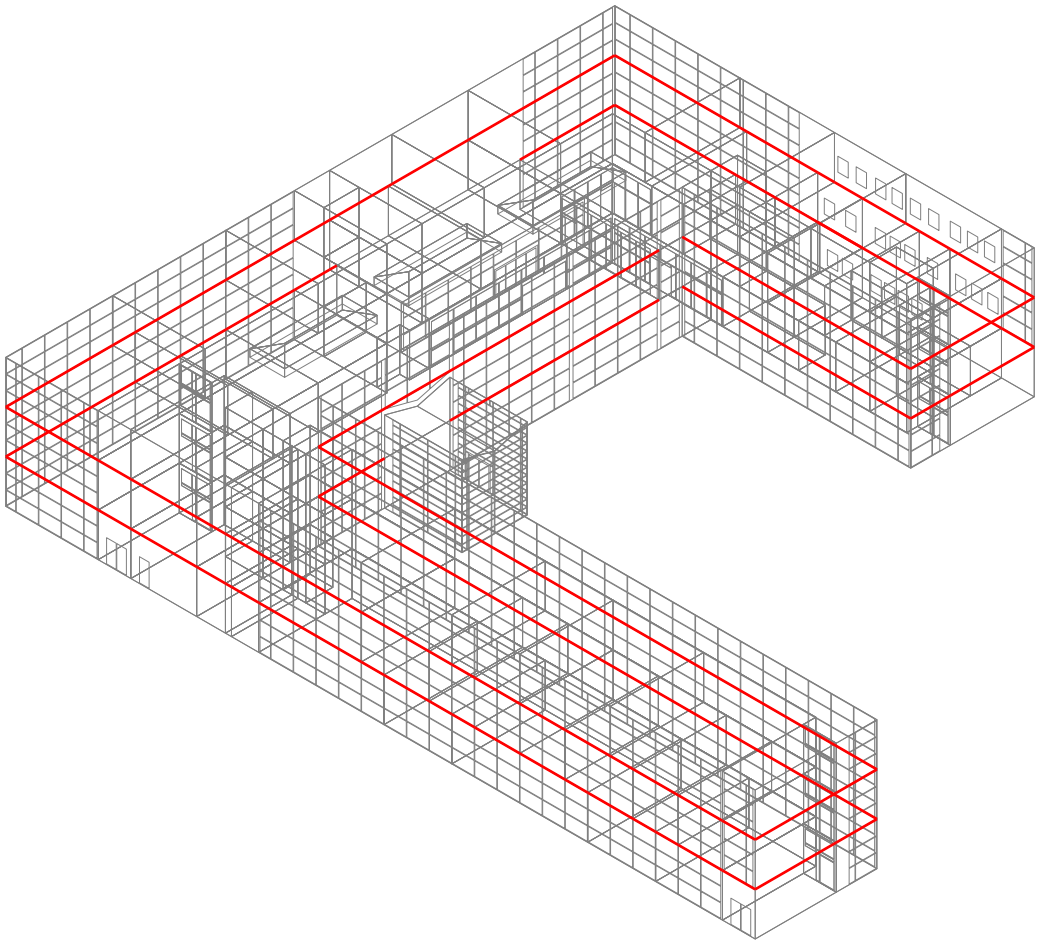
The total length of exposed floors to walls thermal bridges is **50.81 m**.



Interior Floors to Walls

The total length of junctions where exposed floor structures connect with exterior walls. These junctions often occur in cantilevered cases where a room overhangs an entryway or other outdoor space. They can be sources of thermal bridges if insulation under the exposed floor slab is not well connected to that of the exterior walls.

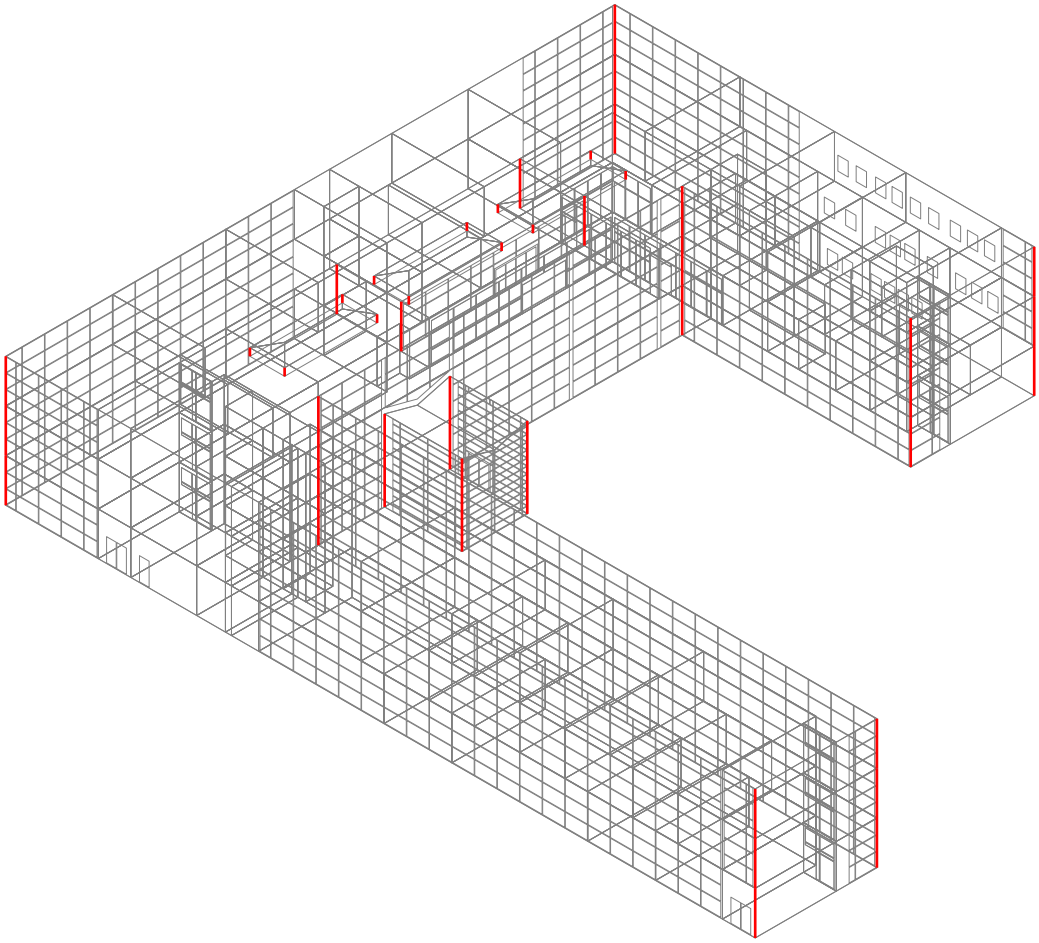
The total length of interior floors to walls thermal bridges is **538.81 m**.



Walls to Walls

The total length of junctions where two exterior walls intersect. These linear details include corners and wall returns, which are common regions of heat transfer when not properly detailed.

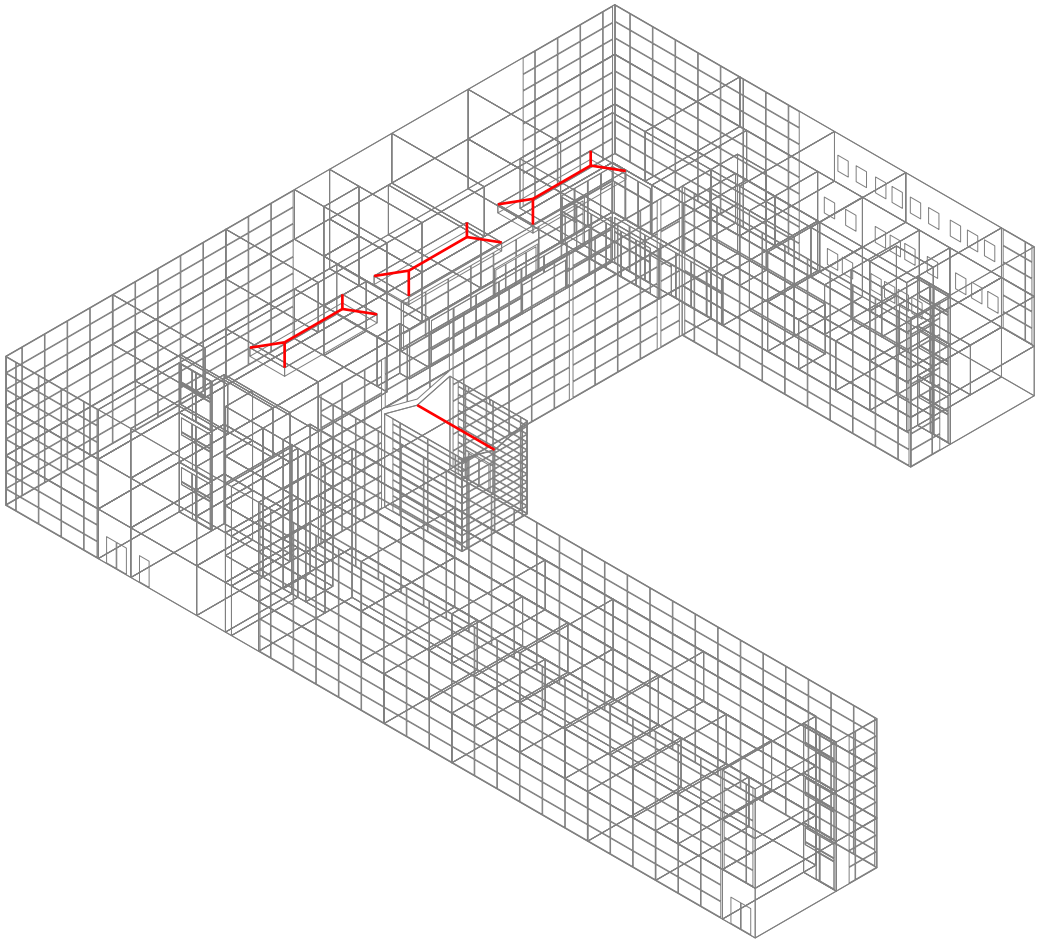
The total length of walls to walls thermal bridges is **142.75 m**.



Roof Ridges

The total length of junctions along roof ridge lines where two sloped roof planes meet. These details often involve complex insulation geometry, making them susceptible to heat leakage if not carefully designed.

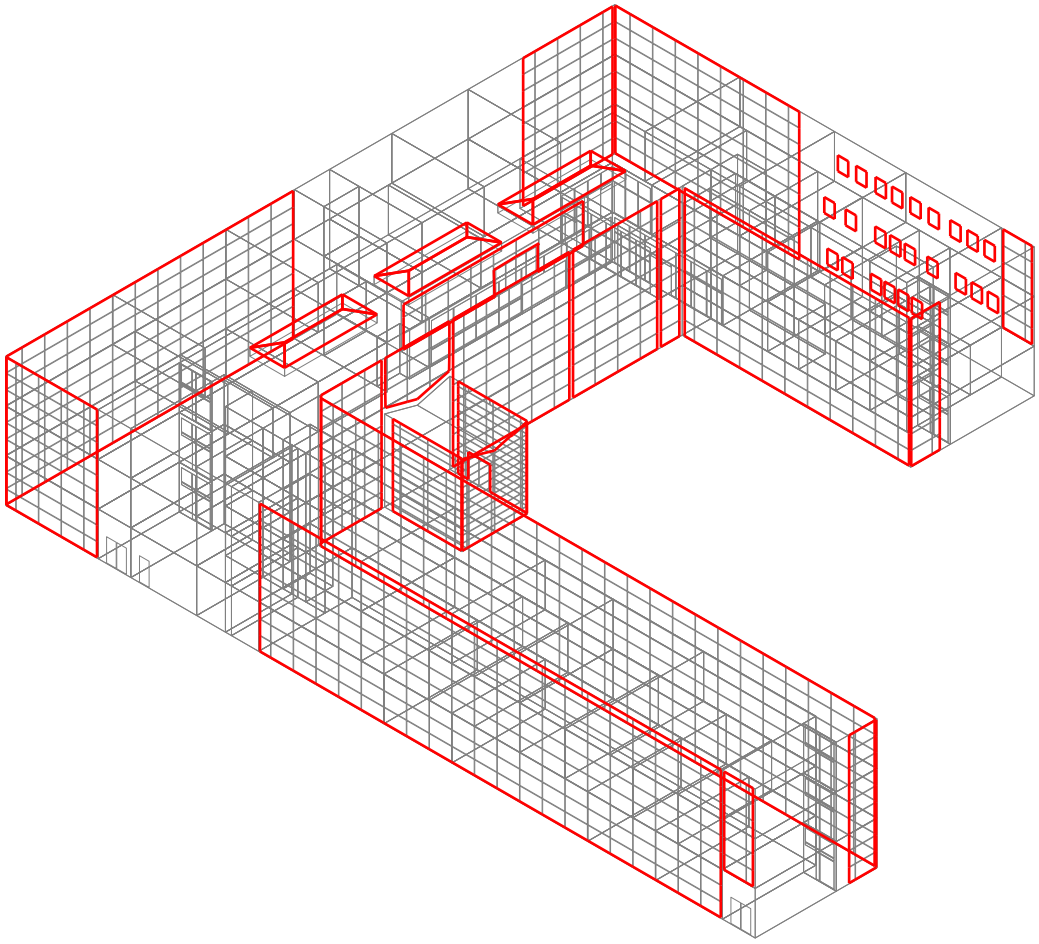
The total length of roof ridges thermal bridges is **48.75 m**.



Window Frames

The total perimeter length of the edges where windows and skylights meet the exterior walls or roofs that support them. Frames usually have an adverse impact on the overall window assembly U-value, particularly when conductive frame materials like aluminum or steel are used. They can also degrade the insulation of surrounding walls or roofs, particularly when thermal breaks in the frame do not align with exterior wall or roof insulation.

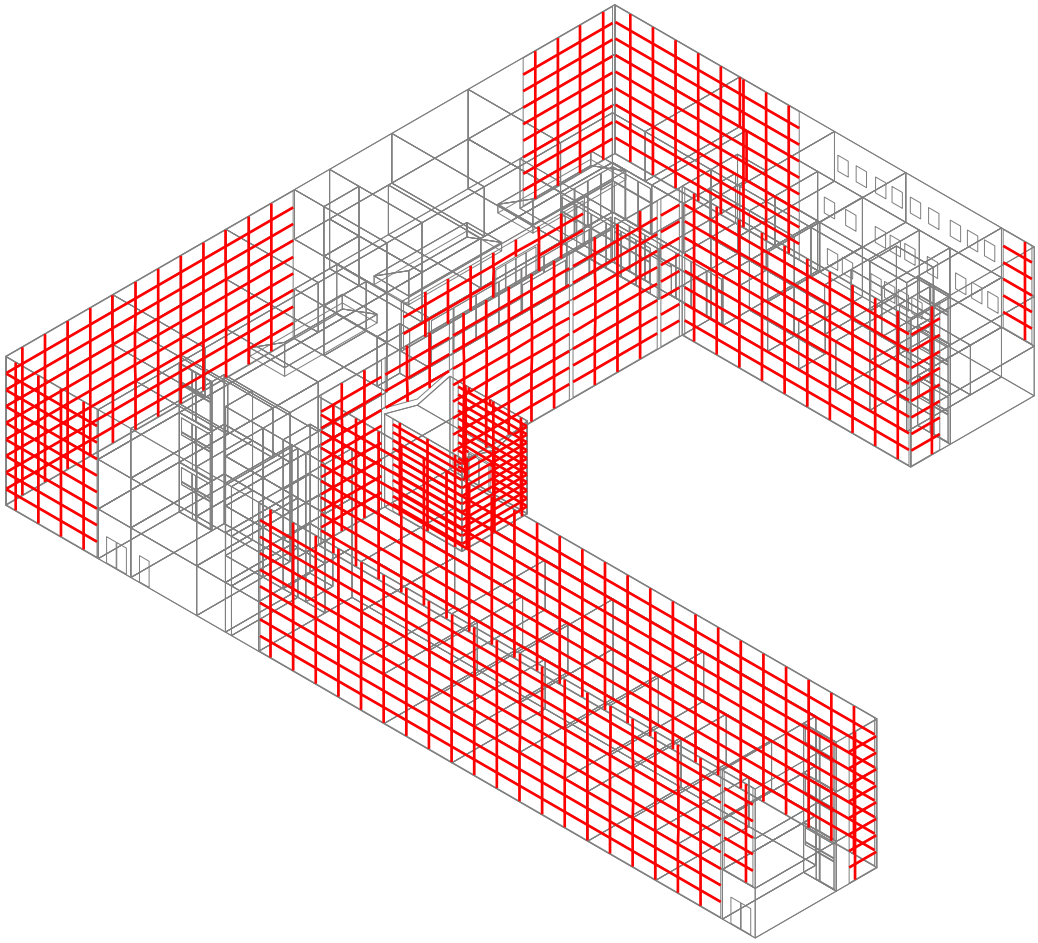
The total length of window frames thermal bridges is **1125.34 m**.



Window Mullions

The total length of vertical and horizontal mullions that divide adjacent glazing units. Mullions are typically more conductive than surrounding insulated glass therefore can increase the overall glazing heat flow and assembly U-value.

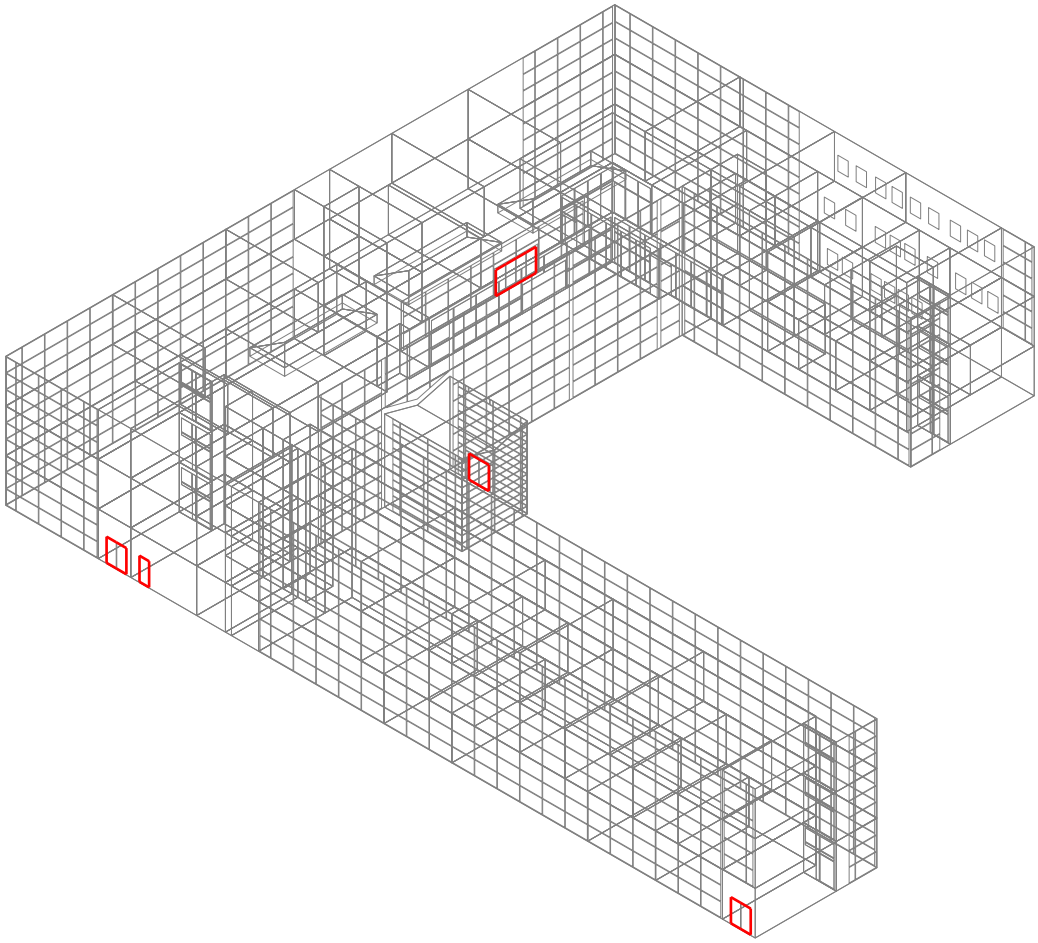
The total length of window mullions thermal bridges is **3007.57 m**.



Door Frames

The total linear length where door frames connect with surrounding wall assemblies. Similar to window frames, proper detailing and the use of thermal breaks are essential to maintain insulation continuity in these junctions.

The total length of door frames thermal bridges is **39.30 m**.



Door Mullions

The total length of vertical mullion members dividing adjacent doors from one another. While relatively uncommon and comparatively small to the bridging that happens across a whole building, these cases can add up to a significant amount of heat flow for lobbies and assembly areas where multiple doors are often placed next to one another to ensure adequate egress.

The total length of door mullions thermal bridges is **12.00 m**.