Installation Guide
Residential\Commercial\Industrial
Masonry Wall
New\ Retrofit
DIY – Do It Yourself Ready
Contractor - Ready

Tools: Cutting knife, measuring roll, staple gun + 12mm pins, Driller or electric screwdriver.

Installation Accessories: wood furring or C shape metal strips, self tapping screws (washers), Polynum or equivalent joints sealing tape.

Recommended to use protective glasses.

Products range: All Polynum™ products.

General: Polynum™ insulation can be easily installed combined in masonry walls. It is essential to use frame (wood or metal) to create minimum air cavities between Polynum and the existing wall. The use of wooden furring will allow faster and easier installation process.

Step 1:
With a measuring roll, measure the wall length from floor to ceiling.

Step 2:
Prepare the wooden furring or metal strips for installation. Wooden furring strips shall be 1" (inch) thick. C shape metal strips shall be 20 to 25mm (1" inch) deep.

Step 3:
Use adhesive caulk or nails to attach furring strips or screw in C shape metal strips to the wall 60cm (24") on-center. Use small pieces of tape to hold the strips against the wall until the caulk has thoroughly cured.

Step 4:
Unwrap Polynum insulation from its original packaging. Using cutting-knife, cut the Polynum at the desired length (prepare Polynum "shreds" per the required length). Allow 10cm (4" inches) for edge overlapping at the end of each piece. (Example: If ceiling length is 7.00m, and width is 4.00m you will need to cut 4x Polynum shreds, 7.20m (Approx 21 feet long each).

Step 5:
From the ceiling edge, secure Polynum to the existing frame. When reaching the floor, you shall have an extra 10cm (4") of Polynum "tail" to be cut later, when work is completed. Move along or across the frame and fix Polynum with staple pins (if frame made of wood) or self tapping screws (if frame made of metal). Fix Polynum to each frame line. Make sure to stretch the Polynum shreds to avoid sagging. Staples or self-tapping screws should be placed every 10cm (4" inches).

Tip: When installing Polynum onto metal strips, it is recommended to use washers.

Step 6:
Upon finishing fixing the first Polynum shred continue with the second (parallel) shred. Follow step 5. If using self adhesive product: upon proceeding, secure the joints (over-lapping) with Polynum self-adhesive strips. When using Polynum without self-adhesive: When fixing the shred onto the strips (lines) with already installed Polynum, 50mm (2 inches) of overlapping is required. Use staple pins or self tapping screws to secure the overlapping joints. Ensure to staple both Polynum joints together. Upon finishing each shred, use Polynum heavy duty closing tape to seal the joints.

Step 7:
For **finish** wall: Install plaster board, or gypsum board onto the fixed wooden furring or C shape metal strips, following board manufacture instruction.

Tip: There is no need to add vapor barrier. Aside from being an excellent insulation solution, Polynum acts as vapor barrier too…!
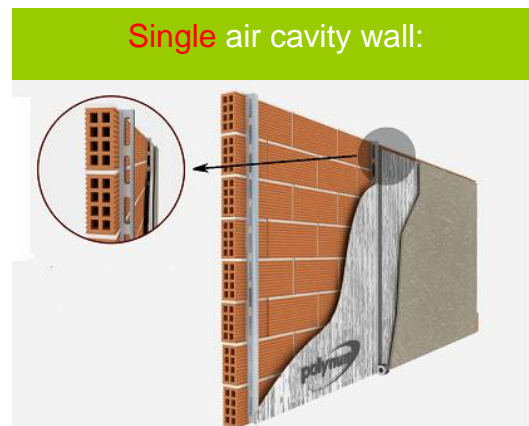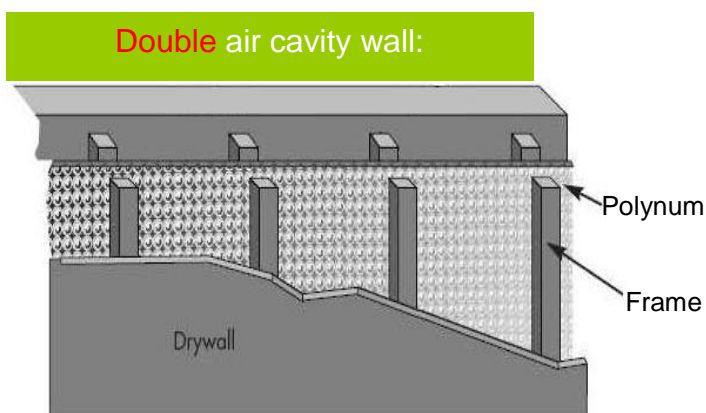
For basement or open wall:
Leave Polynum exposed. If wish to have white finish please consider to use Polynum White, or, Polynum One. Both products delivered with single white color finish.

How to maximize thermal performances in masonry Walls?

General: In order to achieve higher **R value** (better thermal resistance) it is recommended to use double frame, and install Polynum between these two frame systems (sandwich).

Upon completing step 7, install secondary frame (same sizes as the first frame\strips). You may fix the "external" frame\furring\metal strips, across (horizontally), or, align (vertically) to the internal (first frame).

Repeat step 7 to complete the work.

Double air cavity wall:

Polynum

Frame

Drywall

Single air cavity wall:

- Polynum™ installation process is clean, fast and efficient
- Polynum™ required less labor and less time covering similar area compare with bulk insulation
- Polynum™ can be installed anywhere in the buildings.
- Polynum™ only required measuring tape, cutting knife, ducting tape and pair of hands…
- Polynum™ can be left exposed for the installation duration. No need extra cover or handling.
- Polynum™ can be shaped and cut to size, reduced wastage!
- Polynum™ requires no gloves or special protection aids.
- There are almost no limitations to where Polynum™ can be used

Illustration: Polynum installed in masonry walls: