

FOUNDATIONS: CONCRETE VS. CMUs

CHOOSE THE RIGHT PRODUCT FOR YOUR FOUNDATION PROJECT



POURED CONCRETE

VS

CONCRETE MASONRY

STRENGTH

At 3,500 PSI, Poured Concrete is stronger than CMUs but exceeds most foundation wall strength standards.



NO ADVANTAGE: Tension in steel governs strength in most designs.

STRENGTH

Concrete Masonry Units' 2,000 PSI meets most foundation wall strength and building code standards.



NO ADVANTAGE: Tension in steel governs strength in most designs.

VERSATILITY

Poured Concrete provides no aesthetic value and may be prone to cracking.



DISADVANTAGE: Poured Concrete foundations typically offer only one available finish option.

VERSATILITY



CMUs come in a variety of unit shapes for added performance options and aesthetic appeal.

ADVANTAGE: Versatility in performance and design may increase resale value.

AVAILABILITY

At job site, Poured Concrete requires a "hydration period" in order to cure to maximum strength.



DISADVANTAGE: Hydration/curing period may slow construction times.

AVAILABILITY



CMUs are easy to transport and are at maximum strength upon delivery.

ADVANTAGE: CMUs do not require a hydration period and are ready for framing in about a week.

TOTAL COST

Poured Concrete foundations require more material compared to CMUs.



DISADVANTAGE: In general, a turn-key project using Poured Concrete can cost \$7,000 - \$9,000 more than CMUs.

TOTAL COST



Less material is required to complete a foundation project using CMUs.

ADVANTAGE: Because less material is required, a turn-key project using CMUs has a cost savings of \$7,000 - \$9,000.

POURED CONCRETE FOUNDATIONS



At a **much higher total cost, limited application options and virtually no aesthetic appeal**, Poured Concrete foundations offer no substantial benefits when compared to foundations built using CMUs.

CONCRETE MASONRY FOUNDATIONS



With **product and application versatility, job site availability, the aesthetic appeal of masonry, and at a much lower cost**; CMU foundations prove to be a superior alternative to Poured Concrete foundations.



BUILD ON THE BEST OF BOTH

While benefits of CMUs exceed those of Poured Concrete, best results are achieved in utilizing the advantages of both products. **The diagram below illustrates the preferred method by combining CMUs and Poured Concrete.** The result is a foundation with the structural performance of Poured Concrete and the visual appeal, convenience, and cost-effectiveness of CMUs.



POURED CONCRETE + CMUs

CONCRETE STRENGTH

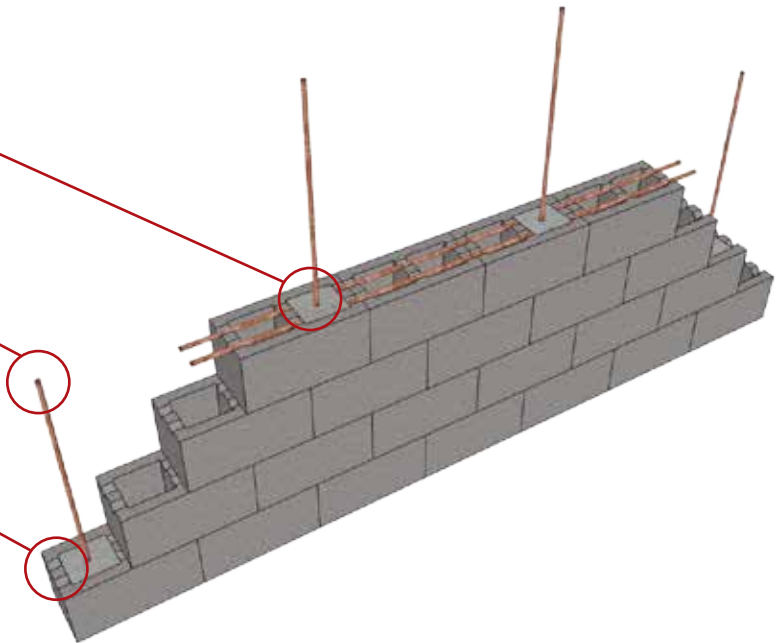
- Concrete masonry units filled with concrete provides comparable wall strength of Poured Concrete at minimal cost

RE-BAR REINFORCEMENT

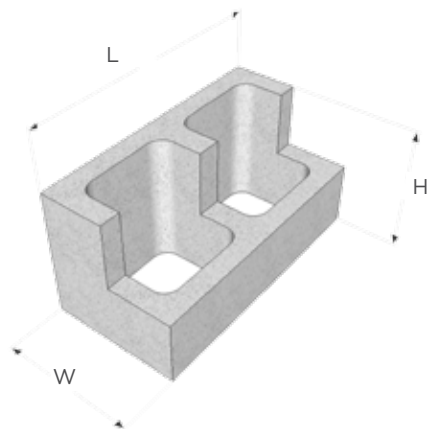
- If desired or required, re-bar can be installed for added wall reinforcement with minimal cost

CMU CONVENIENCE

- Design versatility allows for ease of installation for re-bar placement
- CMUs provide aesthetic appeal to exterior and interior facing walls
- Majority of foundation built using CMUs provides lowest cost solution

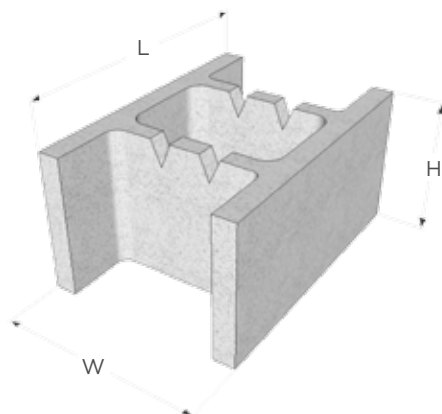


COMMON CMU OPTIONS



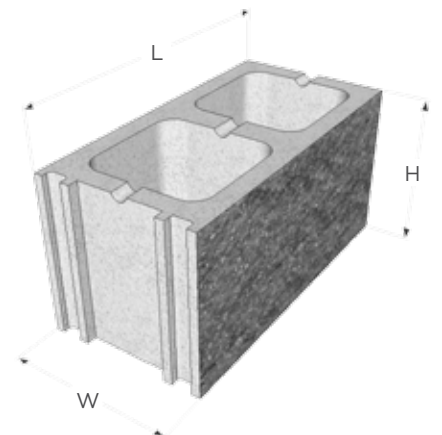
STANDARD UNIT (HEADER)

Commonly used for residential foundation construction, Standard Units are the most cost-effective CMU option.



STANDARD UNIT (RETAINING WALL)

Standard Retaining Wall CMUs provide re-bar grooves for maximum strength at a low cost (illustrated in diagram above).



SPLIT-FACED UNIT

Split-Faced CMUs are commonly used for commercial foundations to achieve maximum performance with visual appeal.