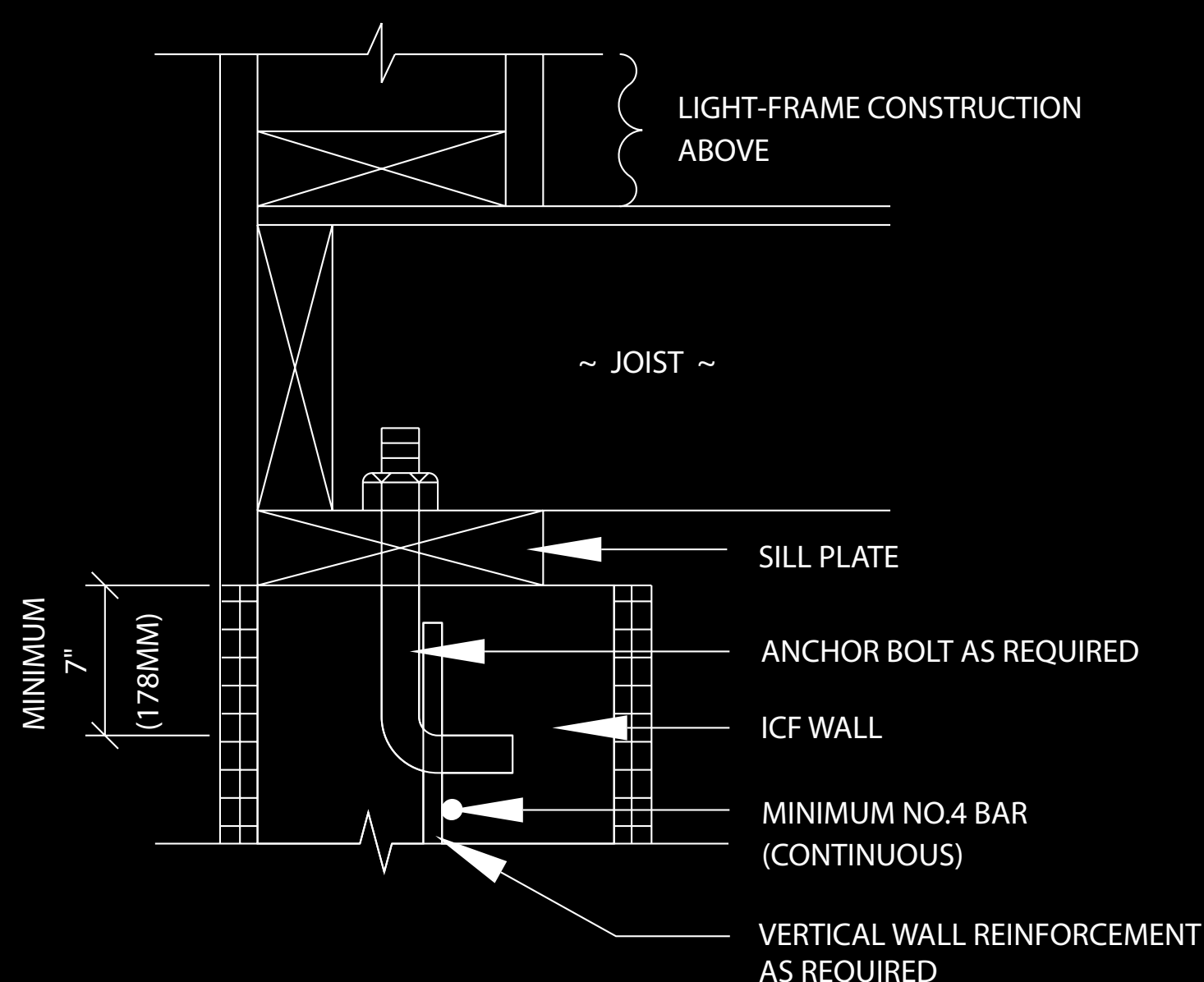


G 02



INSULATING CONCRETE FORMS (ICFs)

ICFs are rigid foam forms that stay in place after the concrete is poured to serve as insulation. They stack together like Lego® blocks and can be used for foundation and above-grade walls.



Section cut through flat wall or vertical core of a waffle or screen grid wall.

Benefits

Energy Efficiency and Comfort

High levels of insulation (typical R-17 to R-26) provides continuous insulation without “thermal bridges” and deadens sound transmission.

Safety and Durability

Reinforced concrete has high seismic and wind load resistance. Additionally, foam and concrete will not decay or rot.

Ease of Installation

Lightweight forms are simple to erect by anyone with basic carpentry skills. Installation is faster than concrete masonry units (CMU) and can occur in temperatures as low as 10°F.

Code Issues

Exposed foam must be covered with drywall for fire resistance and foundation walls must be braced by first floor framing before backfilling excavation.

Cost

When used in all exterior walls, ICF homes cost about 2% to 5% more than wood-framed homes.

Why is it green?

ICFs are energy efficient, provide a continuous layer of insulation, are naturally impervious to airflow when properly connected to the rest of the building, use concrete containing 30% fly ash (a recycled waste material), and are highly durable.

7 pts. Under Enhanced Foundation Waterproofing (Section 2.2.11) of the **NAHB Model Green Home Building Guidelines**, this feature receives 7 points.