



Bond Beam - Design - Size - Types & More

Explore Now

definecivil.com

Definecivil.com

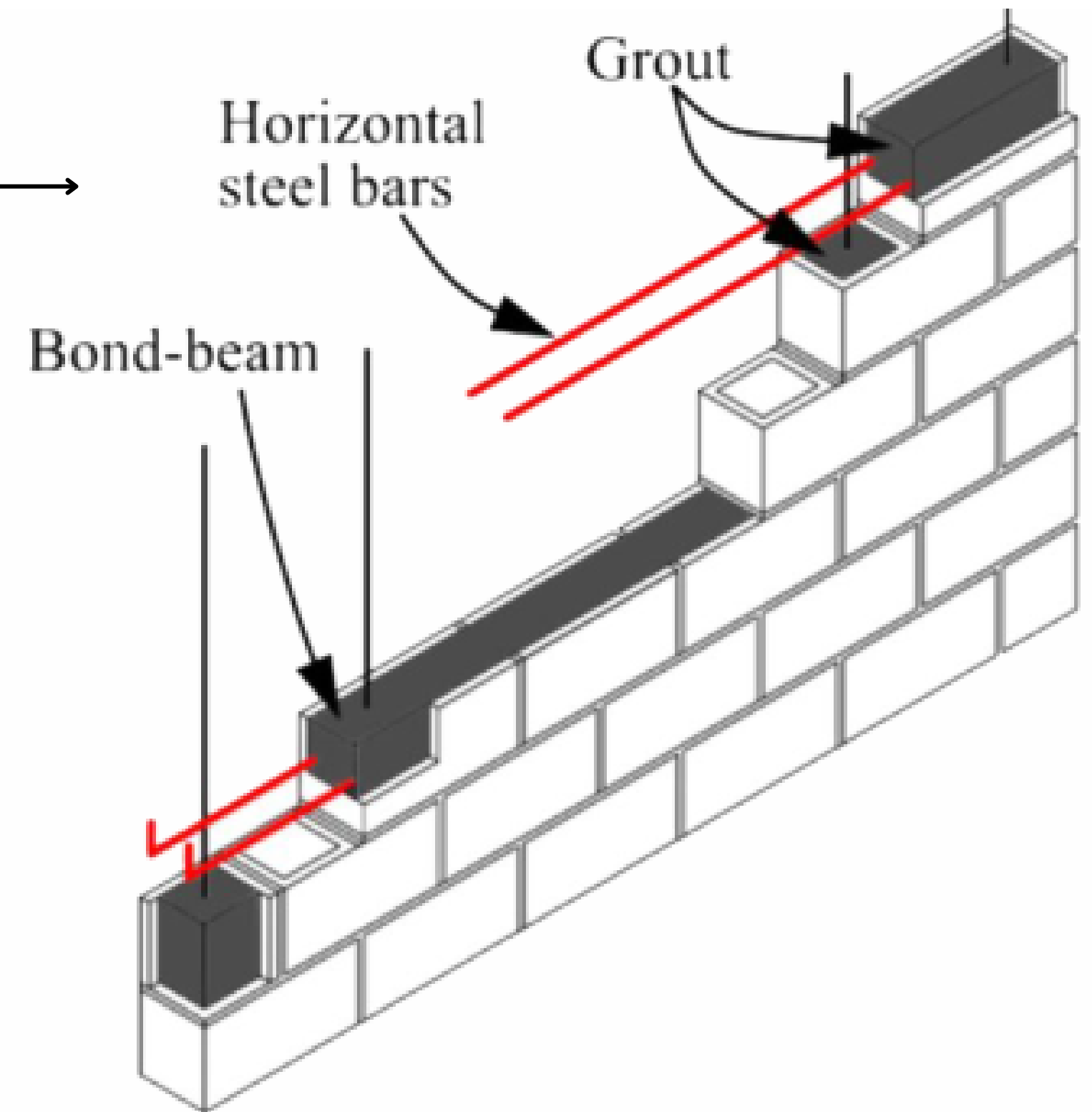
What is a bond beam? —→

A bond beam is horizontally reinforced structural element which is provided in masonry walls at different heights for horizontal strength. It resists lateral and shear loads by distributing the load throughout the wall section.



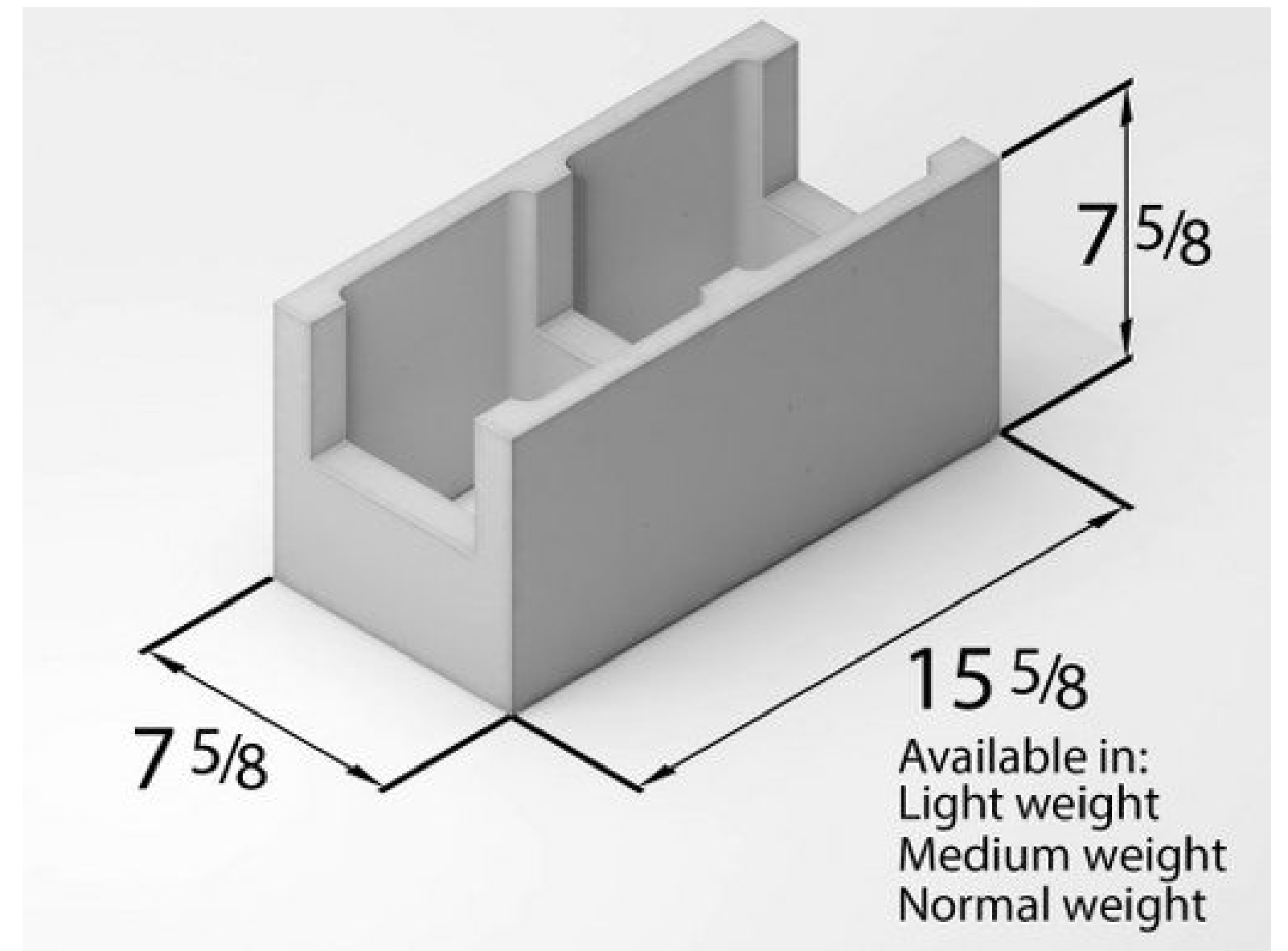
Bond Beam Detail

Bond-beam masonry unit has a reduced-height across webs and the hollow core is afterwards grouted solid. It is typically one course tall and can be found at locations like top of foundation walls, top of walls, floor-diaphragm connection. In highly active seismic zones, you may need to use intermediate bond beams.



Bond Beam Purpose →

Bond beam is used with horizontal reinforcement in concrete which helps to embed the horizontal reinforcement with vertical reinforcement in masonry construction. Bond beam is placed after suitable distance at height of masonry walls to place the reinforcement more than possible.



Definecivil.com

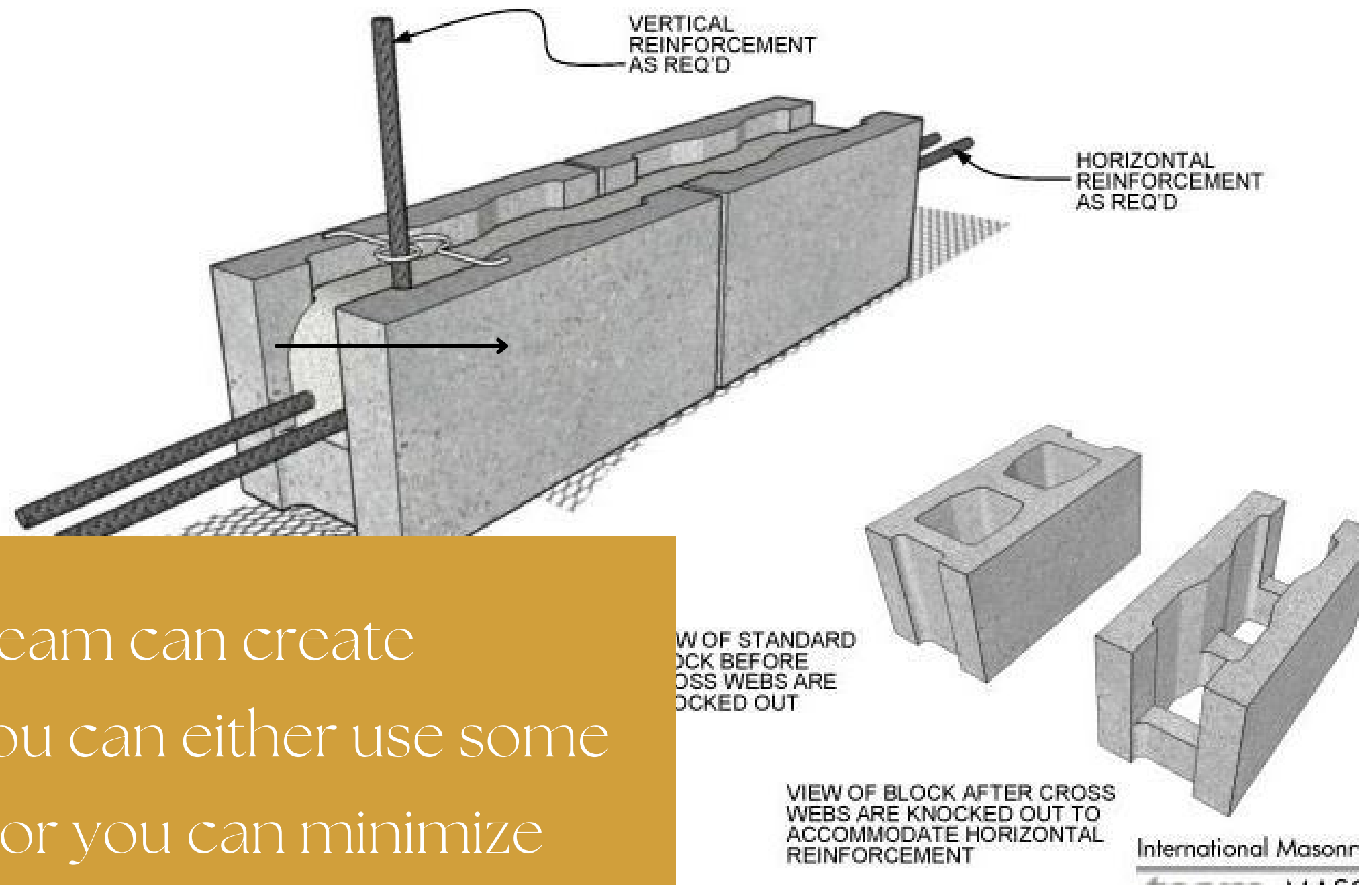
Types



- Brick bond beam
- Wooden bond beams
- Concrete bond beams
- Knockout bond beams



Construction



- -The steel reinforcement in bond beam can create difficulty for the flow of grout. So, you can either use some techniques for grout consolidation or you can minimize the reinforcement to avoid congestion. You can use bigger dia rebar with more spacing – but make sure to check with the code and loading conditions.