Support of Beams

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

9.23.8.1. Bearing of Beams

(1) Beams shall have even and level bearing and the bearing at end supports shall be not less than 89 mm (3½ in) long, except as stated in notes to Span Tables 9.23.4.2.– H to 9.23.4.2.– K.

9.25.3.3. Continuity of the Air Barrier system

(2) Where the air barrier systems consists of flexible sheet material, all joints shall be

　(a) sealed with compatible material such as tape or flexible sealant, or

　(b) except as required by Sentence (2.1) lapped not less than 100 mm (4 in) and clamped, such as between framing members, furring or blocking and rigid panels.

OBJECTIVE

Beams shall be level and bear evenly.

The minimum 89 mm (3½ in) bearing for wood or steel beams will ensure adequate load transfer from the beam to the support and will avoid the crushing of the beam or its' support.
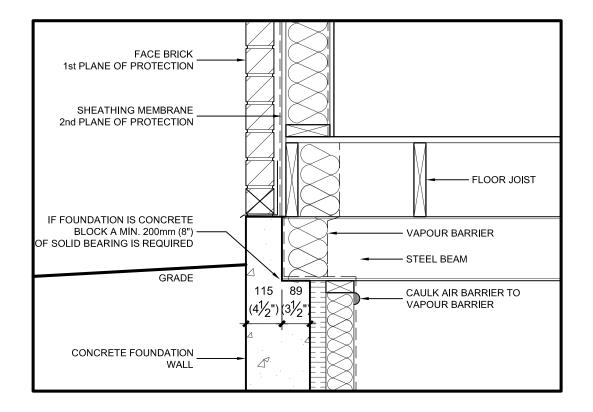
Beam pockets in a foundation wall will weaken the wall and should be avoided. A masonry pilaster or the thickening of the foundation wall at the beam location is an ideal solution. Constructing in this manner will provide a better bearing support for the beam and will increase the foundation wall stability and strength. Particular attention must be given to the air-barrier requirements at this location. The detail below depicts a typical steel beam bearing and air-barrier installation.

FACE BRICK
1st PLANE OF PROTECTION

SHEATHING MEMBRANE
2nd PLANE OF PROTECTION

FLOOR JOIST

IF FOUNDATION IS CONCRETE
BLOCK A MIN. 200mm (8")
OF SOLID BEARING IS REQUIRED

VAPOUR BARRIER

STEEL BEAM

GRADE

115
(4$\frac{1}{2}$")

89
(3$\frac{1}{2}$")

CAULK AIR BARRIER TO
VAPOUR BARRIER

CONCRETE FOUNDATION
WALL