MAGIC BLOCK™ DESIGN RESOURCES
Magic Block Resources

Table of Contents

3 Block Library
4 Design Details
5 Typical Cantilever Wall Section
6 F-HC Freestanding Block Coping With Fence Attachment

The information contained in the Design Resource Manual (DRM) has been compiled by Redi-Rock International, LLC to document the performance of the Redi-Rock products contained therein. It is accurate to the best of our knowledge as of the date of its issue. Information included in the DRM has been prepared in accordance with generally recognized engineering principles and practices. This information should not be used without first securing competent advice with respect to its suitability for any general or specific application. Final determination of the suitability of any design information and the appropriateness of this data for a given design purpose is the sole responsibility of the user.

No warranty of performance by Redi-Rock International, LLC or the DRM authors is expressed or implied by the publishing of the following DRM.

Issue Date: June 8, 2017
<table>
<thead>
<tr>
<th>Block Library</th>
<th>F-HC Hollow Core</th>
<th>F-CHC Corner Hollow Core</th>
<th>F-HHC Half Hollow Core</th>
<th>F-HCHC Half Corner Hollow Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face Texture:</strong></td>
<td>Cobble / Limestone</td>
<td>Ledgestone</td>
<td>Cobble / Limestone</td>
<td>Ledgestone</td>
</tr>
<tr>
<td><strong>Block Weight:</strong></td>
<td>913 lb (414 kg)</td>
<td>770 lb (349 kg)</td>
<td>1002 lb (455 kg)</td>
<td>972 lb (441 kg)</td>
</tr>
<tr>
<td><strong>Block Volume:</strong></td>
<td>6.38 ft³ (0.181 m³)</td>
<td>5.38 ft³ (0.152 m³)</td>
<td>7.01 ft³ (0.198 m³)</td>
<td>6.80 ft³ (0.192 m³)</td>
</tr>
</tbody>
</table>

1. Units for dimensions are inches (mm), typical unless noted otherwise.
2. Confirm block production with licensed Redi-Rock manufacturer.
3. Architectural faces on the blocks have varying texture.
4. Average block weights shown. Actual block volumes and weights may vary.
5. Weights are based upon a concrete density of 143 lb/ft³ (2291 kg/m³).
DESIGN DETAILS

F-HC HOLLOW CORE

<table>
<thead>
<tr>
<th>Face Texture:</th>
<th>Cobble / Limestone</th>
<th>Ledgestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block Weight:</td>
<td>913 lb (414 kg)</td>
<td>770 lb (349 kg)</td>
</tr>
<tr>
<td>Block Volume:</td>
<td>6.38 ft³ (0.181 m³)</td>
<td>5.38 ft³ (0.152 m³)</td>
</tr>
<tr>
<td>Core Volume:</td>
<td>4.09 ft³ (0.116 m³)</td>
<td>4.09 ft³ (0.116 m³)</td>
</tr>
</tbody>
</table>

1. Units for dimensions are inches (mm), typical unless noted otherwise.
2. Confirm block production with licensed Redi-Rock manufacturer.
3. Architectural faces on the blocks have varying texture.
4. Average block weights shown. Actual block volumes and weights may vary.
5. Weights are based upon a concrete density of 143 lb/ft³ (2291 kg/m³).
This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Final wall design must address both internal and external drainage and all modes of wall stability.
ATTACH FLANGE MOUNTED FENCE POSTS TO CAP UNIT WITH CONCRETE ANCHOR BOLTS (RED HED TRU-BOLT WEDGE ANCHORS OR EQUAL)

SET CAP BLOCK ON TOP F-HC UNIT AND EMBED STEEL REINFORCEMENT IMMEDIATELY AFTER PLACEMENT OF CAST-IN-PLACE CONCRETE

CAST-IN-PLACE CONCRETE IN HOLLOW CORE OF F-HC UNITS AND IN TOP HALF OF VERTICAL CORE SLOT IN PC BLOCKS IMMEDIATELY BELOW F-HC BLOCKS, MINIMUM 28 DAY COMPRESSIVE STRENGTH = 4,000 psi

No. 6 HORIZONTAL BARS, CONTINUOUS, 24" OVERLAP ON ENDS Typical, both sides of center core

No. 8 VERTICAL BARS, 11\(\frac{1}{2}\)" O.C. Typical, both sides of center core

No. 3 BAR HOOK - WRAP AROUND LIFTING INSERT IN TOP OF BLOCK AND EXTEND INTO HOLLOW CORE AREA OF F-HC BLOCK

RECESSED LIFTING HOOK AREA FILLED WITH CAST-IN-PLACE CONCRETE (WHEN FREESTANDING BLOCKS ARE FILLED)

COVER TOP OF RETAINING BLOCKS AND ALL EXPOSED GEOGRID WITH 6 mil VISQUEEN PLASTIC LAYER

NO. 57 STONE INFILL IN VERTICAL CORE SLOT, BETWEEN ADJACENT BLOCKS, AND 12" BEHIND BACK OF BLOCKS. FILL BOTTOM HALF OF VERTICAL CORE SLOT FOR PC BLOCKS IMMEDIATELY BELOW FREESTANDING BLOCKS,

ALL REINFORCING STEEL TO CONFORM TO ASTM A706 OR AASHTO M31 GRADE 60.
ALL REINFORCING STEEL TO CONFORM TO ASTM A706 OR AASHTO M31 GRADE 60.

No. 4 BARS, 40" LONG
(TIE TO EMBEDDED HOOKS)

(2) REDI-ROCK R ANCHORS
(11 1/2" FROM EACH END)

END VIEW
CAP BLOCK CAST WITH R-ANCHORS (SPECIALITY BLOCK)

BEND DETAIL
NO. 3 REBAR HOOKS

ATTACH FLANGE MOUNTED FENCE POSTS TO CAP UNIT WITH CONCRETE ANCHOR BOLTS (RED HED TRU-BOLT WEDGE ANCHORS OR EQUAL)

SET CAP BLOCK ON TOP F-HC UNIT AND EMBED STEEL REINFORCEMENT IMMEDIATELY AFTER PLACEMENT OF CAST-IN-PLACE CONCRETE

CAST-IN-PLACE CONCRETE IN HOLLOW CORE OF F-HC UNITS AND IN TOP HALF OF VERTICAL CORE SLOT IN PC BLOCKS IMMEDIATELY BELOW F-HC BLOCKS, MINIMUM 28 DAY COMPRESSIVE STRENGTH = 4,000 psi

No. 6 VERTICAL BARS, 11 1/2" O.C. TYPICAL, BOTH SIDES OF CENTER CORE

No. 6 HORIZONTAL BARS, CONTINUOUS, 24" OVERLAP ON ENDS TYPICAL, BOTH SIDES OF CENTER CORE

No. 3 BAR HOOK - WRAP AROUND LIFTING INSERT IN TOP OF BLOCK AND EXTEND INTO HOLLOW CORE AREA OF F-HC BLOCK

COVER TOP OF RETAINING BLOCKS AND ALL EXPOSED GEOGRID WITH 6 mil VISQUEEN PLASTIC LAYER

NO. 57 STONE INFILL IN VERTICAL CORE SLOT, BETWEEN ADJACENT BLOCKS, AND 12" BEHIND BACK OF BLOCKS. FILL BOTTOM HALF OF VERTICAL CORE SLOT FOR PC BLOCKS IMMEDIATELY BELOW FREESTANDING BLOCKS.