



# CONTRACTOR'S ALERT – 2023.11

## 2021 IBC Cleanout Requirements



### 2021 INTERNATIONAL BUILDING CODE (IBC) AND TMS 602-16

The primary purpose of a cleanout is to provide a convenient way to access, clean and inspect the interior of a masonry structure.

2021 IBC Section 2104.1 states that masonry construction shall comply with the requirements of TMS 602-16.

TMS 602-16 Article 3.2 F requires the following:

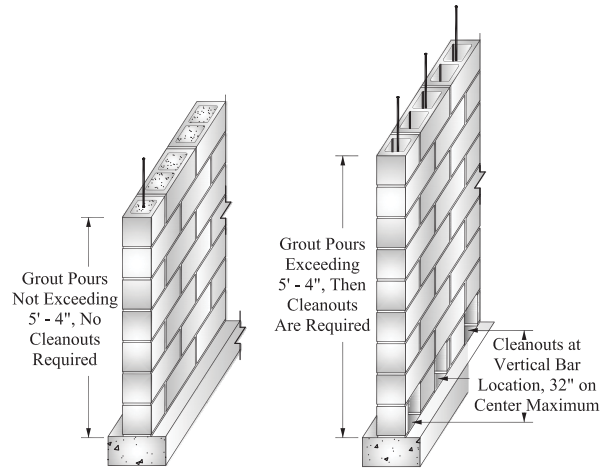
**3.2 F. Cleanouts** — Provide cleanouts in the bottom course of masonry for each grout pour when the grout pour height exceeds 5 ft 4 in.

1. Construct cleanouts so that the space to be grouted can be cleaned and inspected. In solid grouted masonry, space cleanouts horizontally a maximum of 32 in. on center.
2. Construct cleanouts with an opening of sufficient size to permit removal of debris. The minimum opening dimension shall be 3 in.
3. After cleaning, close cleanouts with closures braced to resist grout pressure.

**Note:** A 'Grout Pour' is defined as the total height of wall to be grouted prior to the erection of additional masonry. A 'Grout Lift' is the height of grout placed in one continuous operation.

For exposed areas it may be beneficial to remove face shells for cleanout as it allows for cleaner look of the exposed wall.

In closely spaced vertical rebar cases one option for access is to install inverted bond beam at first course, thus allowing complete access to the adjacent cells when cleanout spacing exceeds rebar spacing.



### GROUTING/CLEANOUT LIMITATIONS

Type of Grouting*	Grouting with no cure time limit	Conventional grout with intermediate bond beams
TMS 602, Article	3.5 D.1.c, 3.5 D.2.b	3.5 D.1.c
Lift Limit	5 ft - 4 in.	5 ft - 4 in.
Pour Height	Per Table 6	Per Table 6
Configuration		
Limitations	<ul style="list-style-type: none"> <li>Grout slump between 8 and 11 inches.</li> <li>Conventional grout or self-consolidating grout.</li> <li>Lift height is 1 1/2 inches less than pour height for shear key, except at top of wall.</li> </ul>	<ul style="list-style-type: none"> <li>Grout slump between 8 and 11 inches.</li> <li>Conventional grout or self-consolidating grout.</li> <li>Lift height is 1 1/2 inches less than pour height for shear key, except at top of wall.</li> </ul>
Cleanouts Required	No	Yes

\*Grout must conform to ASTM C476.

### TMS 602-16: TABLE 6 - GROUT SPACE REQUIREMENTS

Grout type <sup>1</sup>	Maximum grout pour height, ft	Minimum clear width of grout space, <sup>2,3</sup> in.	Minimum clear grout space dimensions for grouting cells of hollow units, <sup>3,4</sup> in. x in.	Cleanouts Required
Fine	1	3/4	1 1/2 x 2	No
Fine	5.33	2	2 x 3	No
Fine	12.67	2 1/2	2 1/2 x 3	Yes
Fine	24	3	3 x 3	Yes
Coarse	1	1 1/2	1 1/2 x 3	No
Coarse	5.33	2	2 1/2 x 3	No
Coarse	12.67	2 1/2	3 x 3	Yes
Coarse	24	3	3 x 4	Yes

1. Fine and coarse grouts are defined in ASTM C476.

2. For grouting between masonry wythes.

3. Minimum clear width of grout space and minimum clear grout space dimension are the net dimension of the space determined by subtracting masonry protrusions and the diameters of horizontal bars from the as-built cross-section of the grout space. Select the grout type and maximum grout pour height based on the minimum clear space.

4. Minimum grout space dimension for AAC masonry units shall be 3 in. x 3 in. or a 3 in. diameter cell.



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