

PCA P12

Levels of Block Filler

1. Scope

- 1.1 This Standard establishes consistent procedures for the specification of block filling and the application of block filler prior to painting paint grade smooth face concrete masonry units.
- 1.2 The purpose of this Standard is to prevent misunderstandings and conflicts when the application of block filler is required.

2. Significance and Use

- 2.1 An inadequately written specification can create confusion in both the bidding and execution of block filler work. Prior to specification, the specific appearance, performance and weather resistance of the work to be block filled should be assessed and specified in the bid documents, and ultimately the contract documents for a project in accordance with the levels of block filler established by this Standard.

3. Definitions and Trade Terms

- 3.1 Definitions and Trade Terms see P9.

4. Reference Documents and Standards

- 4.1 Reference Documents and Standards see P9.

5. Standard Specification

- 5.1 The degree of block filler achieved should not be assessed until all specified paint coats have been applied, as finishing coat(s) will contribute to the degree of fill. It is recommended that a Benchmark Sample showing specified level of block fill on entire sample and finish coat(s) on a portion of the sample be prepared and approved according to PCA Standard P5 to demonstrate the result of block filling to the specified level.
- 5.2 The use of some materials and some block profiles cause air entrapment resulting in unavoidable pin holes. A void or discontinuity visible to the substrate is a system defect.

5.3 Levels of Block Filler

5.3.1 Level 1 - Economy Fill: One coat applied with equipment specified by the coating manufacturer. This level reduces the quantity of paint required for succeeding paint coats. It reduces some irregularities in masonry profile depth. It is normal that voids will remain, depending on the porosity and profile depth of the block. The block filler shall be applied at the spreading rate recommended by the manufacturer. This level is normally used in spaces that are not occupied by the public and in stairways of high rise buildings.

5.3.2 Level 2 - Standard Fill: One coat applied with equipment specified by the coating manufacturer. Back rolling will be performed as necessary to attempt to fill deep irregularities. Masonry profile depth will be slightly reduced. Joints will be visible as tooled. Number of voids will be minimized, but voids may remain depending on the porosity of the block. A maximum of ten voids per square foot of surface area shall be deemed to be acceptable. The block filler shall be applied at the spreading rate recommended by the manufacturer. This level is normally used in finished areas that are occupied by the public.

5.3.3 Level 3 - Premium Fill: Two or more coats of high performance block filler manufactured to be applied at a high dry film build. Block filler shall be back rolled to eliminate voids and reduce the majority of the masonry profile depth. This system, with an appropriate paint finishing system, produces a surface that is easier to clean to meet health regulations. Exterior use of this level of block filler, with an appropriate paint finishing system, will reduce water intrusion at exterior walls.

5.4 Specifications not specifically stating the level of block filler to be attained will be assumed to imply a Level 2 Standard Fill.

5.5 The acceptability of the Level 2 Standard Fill surfaces shall be determined when viewed without magnification, at a distance of thirty-nine (39) inches or one (1) meter or more, under finished lighting conditions and from a normal viewing position.

5.6 The acceptability of the Level 3 Premium Fill surfaces shall be determined when viewed with magnification of 5X.

6. Comments

- 6.1 Since the number of coats and application techniques required for block filling impact project costs, the painting specification should incorporate the appropriate level(s) of block filler as defined by this Standard.
- 6.2 The masonry specification should properly define all cleaning and detailing of new masonry prior to block filler and painting work. Unless specified otherwise, this work is not the responsibility of the Painting Contractor.
- 6.3 The result of any particular level of block filler will vary due to the fact that concrete masonry units vary greatly in profile depth and porosity. The filling of holes is not the responsibility of the Painting Contractor and should be pointed up by others prior to the application of block filler.
- 6.4 Proper specification of masonry materials, such as requiring graded aggregates to minimize masonry porosity, is required to achieve the best appearance and performance of the block filler and paint system specified. This Standard outlines procedures for on-site determination and approval of achievable quality from specified paint and coating systems applied to paint grade smooth face concrete masonry units.
- 6.5 This Standard clarifies areas of responsibility. Improved communication reduces misunderstandings.
- 6.6 This Standard is a nationally recognized consensus document for the painting and coating industry's work practices.

7. Disclaimer of Liability

- 7.1 PCA does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any of the information contained herein.