

ORIGIN and CAUSE - Masonry Cracks



1. This home in Chester developed cracks in the masonry chimney.



2. Originally the cracks developed in the lower portion, and the contractor "patched" them by covering them with a brick overlay.



3. Subsequently, cracks also developed in the upper portion.



4. This entire piece came off with one blow from a chipping hammer.

Conclusion:

The interior grout was soft and wet, it had never hardened due to a lack of cement. The moisture in the grout expanded when it froze, causing the cracks. When the chimney was torn down they found numerous other construction defects -- lack of reinforcing steel, paper stuffed in the masonry voids, etc.

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