

5480206 Retaining Wall Systems
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (Industry 9-12-23)

5480206 Retaining Wall Systems: Section 548-2.6.2. Delete the prescriptive specified concrete requirements and change to: "...provided the interior face of the MSE wall panels have three inches of concrete cover over the reinforcement and the concrete used in the panels is either contains highly reactive pozzolans or is ternary mix design meeting the requirement of Table 346-2 with a surface resistivity equal or greater than 29 kOhm-cm".

Response: Agree with this comment.

Action: The concrete panels ingredients/proportion and highly reactive pozzolan criteria has been removed and referenced to 346 with surface resistivity equal or greater than 29 kOhm-cm.

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Comments: (Industry 10-04-23)

548-2.6.2 Paragraph Example Test backfill material for pH as determined by FM 5-550. For walls using metallic reinforcement, use backfill material with a pH, between 5.0 and 10.0. For polyester geosynthetic reinforcement, use backfill material with a pH between 5.0 and 9.0. Sources of select backfill material having a pH as low as 4.5 for walls utilizing metallic reinforcement or 3.0 for walls utilizing geosynthetic reinforcement when there are no steel piles, metallic elements or pipes, other than metallic reinforcement placed within the backfill, may be used provided the interior MSE wall panels have three inches of concrete cover of the reinforcement and the mix design meets one of the two options below. 1. The concrete used in the panels contains the following ingredients and proportions: a. The quantity of cement replaced with Type F fly ash is 10% to 20% by weight. b. The quantity of cement replaced with slag is 50% to 60% by weight. c. Portland cement is 30% by weight of total cementitious material. d. The total weight of the Type F fly ash and slag does not exceed 70% of total cementitious material. 2. In lieu of the mix design described above, a mix design with a highly reactive pozzolan meeting the requirements of 346-2.3 can be substituted. Examples of mix designs meeting this requirement are: a. 8% silica fume plus 20% fly ash b. 10% metakaolin plus 20% fly ash. Provide proper curing for these materials to prevent surface cracking. Please note all formatting above was automatically removed this comment box. Also, Unable to upload table. We will send table directly to SMO with comments.

Response: Proposed changes to the pH are not accurate. Further discussions with the structures office about the concrete requirements as shown in the above comment resulted in removing this portion out and referring to specs 346. I see the confusion with the upper and lower limit of pH. That sentence has been revised to make it easy to understand. Thank you for the feedback.

Action: 548-2.6 language has been revised.
