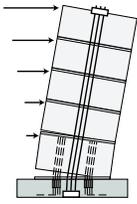


HYBRID PRECAST WALL SYSTEMS

FOR SEISMIC REGIONS



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July 13, 2010

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Industry Meeting Resolutions

Meeting Date: May 30, 2010

Meeting Venue: PCI Annual Convention, Washington, D.C.

Attendance: W. Korkosz, D. Dieter, S.K. Ghosh, J. Albrigo, Y. Kurama, B. Smith

The following resolutions were made during the meeting:

Results from Trial Grout Mixes

- The results of the different trial grout mixes for use inside the Type 2 mechanical splice sleeves for the E.D. bars in Specimen #3 were reviewed. In general, the compressive strength of the grout increased with decreasing water content. However, the addition of a super-plasticizer (and the associated decrease in water content) did not increase the compressive strength of the grout, but rather decreased the workability.

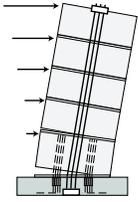
Action Plan for Specimen #3

- With regards to the Type 2 mechanical splice connections for the E.D. bars, based on the splice failures observed in Specimen #2, the industry advisory panel recommended taking actions to improve the performance of the splices in Specimen #3.
- For use in the E.D. bar splice sleeves, the panel recommended using a nonshrink grout mix with the highest compressive strength available in the industry, while maintaining an adequate level of workability. The final decision on this grout mix would be based on the test results from a series of trial grout mixes to be conducted prior to erecting the specimen.
- Additionally, the panel recommended welding a circular 1/2" thick metal plate onto the end of each E.D. bar to be placed within the splice. As-built measurements will be taken at the base-panel-to-foundation joint to aid in the design of the plate thickness, plate diameter, weld location and length of embedment for the E.D. bars.
- Finally, the panel recommended placing the grout within the sleeve using a hand pump. This would ensure that the grout is placed completely above, below, and around each E.D. bar with the welded plate at the end. Further, it would ensure that the grout has uniform consistency and that its properties are not altered by being forced through the small gap between the welded end plate and the perimeter of the sleeve.

This project is funded by the Charles Pankow Foundation and the Precast/Prestressed Concrete Institute. Any opinions, findings, conclusions, and/or recommendations expressed in this material are those of the researchers and do not necessarily represent the views of the sponsors.

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Specimens #4, #5, and #6

- Specimen #4 will be a repeat of the previously tested hybrid wall specimen, with the incorporation of modifications to the E.D. bar construction detail across the base joint. Rather than Type 2 mechanical splices, a fully-developed length of each E.D. bar will be embedded within corrugated metal ducts cast inside the foundation and lower wall panel. The specific details of this connection will be discussed and finalized prior to the design and casting of Specimen #4.
- Wall panels with openings, ordinary confinement detailing, and/or a second emulative wall will be incorporated in the final phase of testing consisting of Specimens #5 and #6. The use of Type 2 mechanical splices for the E.D. bar connections at the base may also be further investigated in these future tests.

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