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16. Abstract Large scale tests were conducted to investigate the integral behavior of structural walls with highly-confined boundary elements. Five test units with similar geometry and longitudinal reinforcement were loaded cyclically in single bending. Design parameters included column length, transverse reinforcement in the wall and wall thickness.  Test results are compared with predictions of deformation capacity and shear capacity. Experimental plastic hinge lengths are derived for both tall and short columns. The steel contribution to shear capacity is evaluated based both on the action of the transverse bars in the wall and on that of the boundary element spirals. Web crushing capacity is discussed in relation to the critical compression struts that transfer shear between the compression and tension boundary elements in the plastic hinge region.		13. Type of Report and Period Covered Final Report -	
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