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Manual  
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## Engineering and Design DESIGN OF SHEET PILE WALLS

**1. Purpose.** This manual provides information on foundation exploration and testing procedures, analysis techniques, allowable criteria, design procedures, and construction consideration for the selection, design, and installation of sheet pile walls. The guidance is based on the present state of the technology for sheet pile-soil-structure interaction behavior. This manual provides design guidance intended specifically for the geotechnical and structural engineer. It also provides essential information for others interested in sheet pile walls such as the construction engineer in understanding construction techniques related to sheet pile wall behavior during installation. Since the understanding of the physical causes of sheet pile wall behavior is actively expanding by better definition through ongoing research, prototype, model sheet pile wall testing and development of more refined analytical models, this manual is intended to provide examples and procedures of what has been proven successful. This is not the last nor final word on the state of the art for this technology. We expect, as further practical design and installation procedures are developed from the expansion of this technology, that these updates will be issued as changes to this manual.

**2. Applicability.** This manual applies to all HQUSACE elements, major subordinate commands, districts, laboratories, and field operating activities having civil works responsibilities, especially those geotechnical and structural engineers charged with the responsibility for design and installation of safe and economical sheet pile walls used as retaining walls or floodwalls.

FOR THE COMMANDER:



WILLIAM D. BROWN  
Colonel, Corps of Engineers  
Chief of Staff