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| GP 04-01-01 | Concrete Design and Construction | March 2002 |
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# Concrete Design and Construction

## GP 04-01-01

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### Scope

- 1) [I] This Global Practice (GP) covers the design and construction of concrete structures.
  - 2) [I] An asterisk (\*) indicates that additional information from Owner is required or approval by Owner is required.
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## 1. Required References

- 1) This Section lists Practices and Standards that are referenced and assumed to be a part of this document. Unless otherwise specified herein, use the latest edition.
- 2) [I] Local codes and standards may be substituted for the ones referenced herein, provided the following provisions are met:
  - a) The resultant design meets the safety and serviceability criteria attained through this GP.
  - b) Substitution is accepted by the authorities where the facility is to be located and by the Owner's Engineer.

### 1.1. ACI–American Concrete Institute

|                |                                                                                           |
|----------------|-------------------------------------------------------------------------------------------|
| ACI 117        | Standard Specification for Tolerances for Concrete Construction and Materials ACI 117R-90 |
| ACI 301        | Specifications for Structural Concrete                                                    |
| ACI 308        | Standard Practice for Curing Concrete                                                     |
| ACI 318M/318RM | Building Code Requirements for Structural Concrete and Commentary                         |

### 1.2. ASTM–American Society for Testing and Materials

|                   |                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------|
| ASTM A 615/A 615M | Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement |
| ASTM C 31/C 31M   | Standard Practice for Making and Curing Concrete Test Specimens in the Field               |
| ASTM C 94/C 94M   | Standard Specification for Ready-Mixed Concrete                                            |
| ASTM C 150        | Standard Specification for Portland Cement                                                 |
| ASTM C 192/C 192M | Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory          |

## 2. Additional References

- 1) The following Practices and Standards shall be used with this GP as applicable.
- 2) [I] Local codes and standards may be substituted for the ones referenced herein, provided the following provisions are met:
  - a) The resultant design meets the safety and serviceability criteria attained through this GP.
  - b) Substitution is accepted by the authorities where the facility is to be located and by the Owner's Engineer.

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