

ACI 304.2R-17

# Guide to Placing Concrete by Pumping Methods

Reported by ACI Committee 304



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## Guide to Placing Concrete by Pumping Methods

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# Guide to Placing Concrete by Pumping Methods

Reported by ACI Committee 304

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*This guide discusses the use of pumps for transporting and placing concrete. Rigid and flexible pipelines, couplings and other accessories, and the various types of concrete pumps are discussed. The importance of proportioning a pumpable concrete mixture is emphasized with reference to sources for further direction on its design. Evaluation of trial mixtures to ensure pumpability and strength is encouraged. Of specific importance is a discussion on the use of lightweight aggregates. Methods to saturate these aggregates and provide a consistent moisture content are discussed.*

*Preconstruction planning for equipment placement and line routing are emphasized. Discussions on achieving a consistent mixture and its critical importance are also addressed.*

**Keywords:** blockage; boundary layer; concrete pump; coupling; mixture design; pipeline; placing boom; preprimed; pumpability; reverse pumping; valve.

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