

Answers from the PTI DC-10 Slab-on-Ground Committee

September 2009 • FAQ No. 8

Q Are anchorage back-up bars required for post-tensioned slab-on-ground construction using ½-in. diameter or smaller seven-wire, 270 ksi strand tendons?

A In common slabs-on-ground applications the answer is NO, unless they are required by governing building code or the licensed design professional.

BACKGROUND

This opinion by the PTI DC-10 Slab-on-Ground Committee is based on the acceptable performance of millions of slab-onground applications that have been constructed in the past 40+ years where back-up bars have not been used. A paper, "Back-Up Bars for Residential Slab-on-Ground Foundations", by Gregory P. Chacos, PTI Journal, V5, No. 1, July 2007, supports this opinion. ACI 318 Building Code Requirements for Structural Concrete does not govern the design and construction of post-tensioned slab-on-ground foundations (see R1.1.7 of ACI 318-08). Thus, the back-up bar requirements specified in ACI 318 do not apply to post-tensioned slab-on-ground applications.



Frequently Asked Questions, Sept. 2009

38800 Country Club Drive, Farmington Hills, MI 48331 Phone: (248) 848-3180 • Fax: (248) 848-3181 • Web: www.post-tensioning.org

This document is intended for the use of professionals competent to evaluate the significance and limitations of its contents and who will accept responsibility for the application of the materials it contains. The Post-Tensioning Institute reports the on-going material as a matter of information and therefore disclaims any and all responsibility for application of the stated principles or for the accuracy of the sources other than material developed by the Institute. The Post-Tensioning Institute, in publishing the Frequently Asked Questions, makes no warranty regarding the recommendations contained herein, including warranties of quality, workmanship, or safety, express or implied, furthing including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. THE POST-TENSIONING INSTITUTE SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES BEYOND REFUND OF THE PURCHASE PRICE OF THIS ISSUE OF FREQUENTLY ASKED QUESTIONS.

The incorporation by reference or quotation of material in the Frequently Asked Questions in any specifications, contract, documents, purchase orders, drawings, or per diems shall be done at the risk of those making such references or quotation and shall not subject the Post-Tensioning Institute to any liability, direct or indirect, and those making such reference or quotation shall waive any claims against the Post-Tensioning Institute.

Copyright © 2009 by Post-Tensioning Institute All Rights Reserved Printed in U.S.A.