Recent Development in Reinforced Concrete Slab Analysis, Design, and Serviceability 2011

Held at the ACI Fall 2011 Convention
ACI SP 287

Toronto, Ontario, Canada
21 – 25 October 2011

Editors:

Mustafa Mahamid
Faris Malhas

ISBN: 978-1-62276-639-0
# TABLE OF CONTENTS

SP-287—1  
Requirements for Seismic-resistant Flat Plates: Strength and Ductility .......... 1  
Authors: A. Ghali and R.B. Gayed

SP-287—2  
Un-bonded Post-Tensioned Slabs Development and Repair Systems  
using CFRP ................................................................. 21  
Authors: P. Chakrabarti, U. Kim, and D. Naish

SP-287—3  
Historical Perspective on the Evolution of Two-Way Slab Design ............... 39  
Authors: M. Kamara, M. Mahamid, and L. C. Novak

SP-287—4  
Performance of Shearbands in Concrete Slab-Column Connections ............. 49  
Authors: T. H.-K. Kang and H.-G. Park

SP-287—5  
Shear Capacity of Slabs and Slab Strips Loaded Close to Support ............... 65  
Authors: E. O. L. Lantsoght, C. V. D. Veen, and J. C. Walraven

SP-287—6  
Flexural Reinforcement Essential For Punching Shear Resistance of Slabs ...... 83  
Authors: C. Peiris and A. Ghali

SP-287—7  
Special Considerations in the Reinforced Concrete Slab Design for the  
St. Cloud Hospital East Addition ........................................... 99  
Authors: M. Smith and M. E. Thomas

SP-287—8  
Evaluating Punching Shear Strength of Slabs without Shear Reinforcement 
Using Artificial Neural Networks ........................................... 107  
Authors: A.M. Said, Y. Tian, and A. Hussein