



ALL CONTENTS ©2018 – ALL RIGHTS RESERVED

NONSTRUCTURAL DEFICIENCIES

AUTHOR: JOHN BOWMAN – EDITOR(S): NACBI EDUCATION
COMMITTEE

NACBI Professional Growth & Support System Self-Assessment
Program Publication

This publication is intended SOLELY for use by PROFESSIONAL PERSONNEL who are competent to evaluate the significance and limitation of the information provided herein, and who will accept total responsibility for the application of this information. The National Association of Commercial Building Inspectors™ & Thermographers (NACBI) DISCLAIMS any and all RESPONSIBILITY and LIABILITY for the accuracy of and the application of the information contained in this publication to the full extent permitted by law.

FORKLIFTS PUSHING WOODEN PALLETS ACROSS A LOADING DOCK RESULTED IN ABRASIONS AND GOUGING OF THIS CONCRETE FLOOR.



WHAT ARE NONSTRUCTURAL DEFICIENCIES?

BACKGROUND

Nonstructural deterioration is generally a surface deficiency resulting from conditions of the design, construction, or service life of the building. These deficiencies are not immediately critical to the performance of the structure, but they can cause further deterioration, which can eventually lead to structural deficiencies.

Some common nonstructural concrete defects include:

-  Abrasion
 -  Blistering
 -  Chemical Reaction Cracking
 -  Cracking Due to Construction Practices
 -  Construction Overloading Cracking
 -  Cracking
 -  Discoloration
 -  Dusting
 -  Efflorescence
 -  Exudation
 -  Flaking
 -  Flow (Lift) Lines
 -  Honeycombing
 -  Peeling
 -  Pitting
 -  Pop-outs
 -  Plastic Shrinkage Cracking
 -  Sand Streaking
-



OBJECTIVE

NACBI'S APPROACH

This manual does not prescribe repair techniques, nor does it address structural problems in concrete that do not manifest themselves visually. Through the presentation of basic design and technical information, this manual provided information aides inspectors in the evaluation of deterioration conditions of concrete structures in buildings. This manual is primarily for evaluating building structures, and not structures such as bridges, storage bins, or mass concrete structures such as dams. A visual inspection of the deterioration of concrete structures reveals only generalized dangers. For a complete analysis of major structural deficiencies, the services of an experienced structural engineer are required.

