NOTES:
THIS REPAIR METHODOLOGY IS APPLICABLE
FOR 2ND FLOOR TO 3RD FLOOR BEAMS
(ABOVE AUDITORIUM AND 2ND FLOOR BEAMS)

## REPAIR METHODOLOGY FOR CRACKS ALONG RECTANGULAR PIPE SLEEVES:

A. SURFACE PREPARATION

1. CLEAN THE CRACKS AND SURROUNDING AREA TO REMOVE DUST, LOOSE MATERIAL, OR ANY CONTAMINANTS. ENSURE SURFACES ARE DRY BEFORE APPLICATION OF EPOXY GROUT.

B. EPOXY INJECTION

1. DRILL ENTRY AND EXIT PORTS: DRILL $\frac{3}{4}$" MINIMUM DIAMETER INJECTION HOLES. SPACING OF HOLES SHOULD NOT BE GREATER THAN 500mm FROM EACH OTHER.

2. SEALING THE CRACKED SURFACE: APPLY A SEALING COMPUND OVER THE CRACK TO PREVENT THE EPOXY FROM LEAKING OUT.

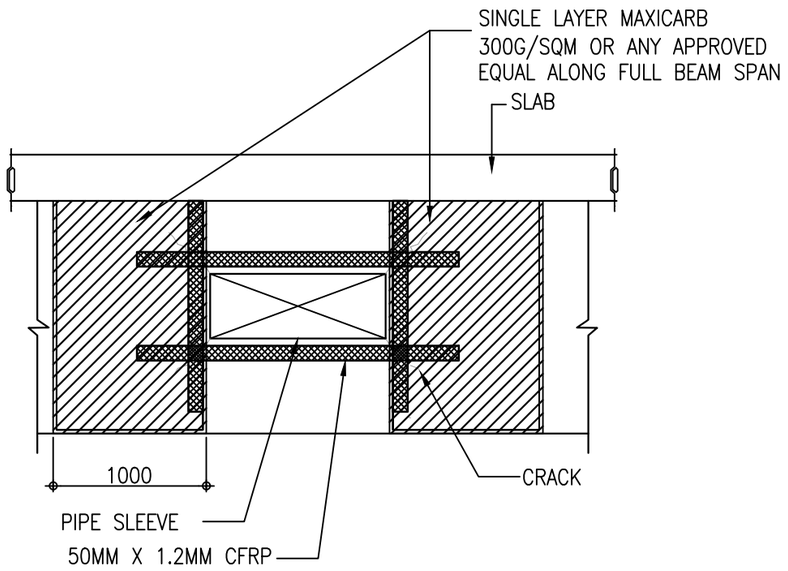
3. INJECT EPOXY: INJECT SIKADUR–752 OR ANY APPROVED EQUAL INTO THE DRILL PORTS UNTIL IT FLOWS OUT OF THE ADJACENT PORT, ENSURING THE ENTIRE CRACK IS FILLED.

4. CURING: ALLOW THE EPOXY TO CURE ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

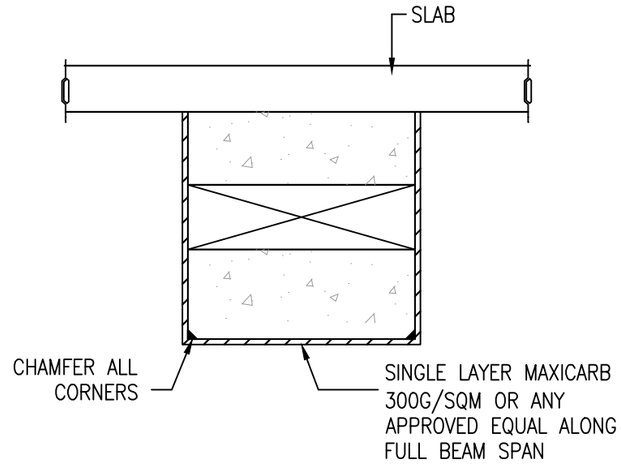
C. ADDITIONAL REINFORCEMENTS

1. APPLY 50mm X 1.2mm CFRP PLATE AT EACH SIDE OF THE PIPE SLEEVE, EXTENDING AT LEAST 250MM FROM BOTH SIDES OF THE CRACKED CORNER.

2. APPLY CFRP, 300G/SQM, EXTENDING 1000mm FROM BOTH SIDES OF THE SLEEVES.




FRONT VIEW




SECTION VIEW

UP PCED LIBRARY
**CRACK REPAIR ALONG RECTANGULAR PIPE SLEEVE**
1 / –
SCALE 1:10

NOTE:

PURSUANT TO THE SECTION 4 OF ANNEX "A" OF THE REVISED IMPLEMENTING RULES AND REGULATIONS OF R.A. 9184, APPROVED BY THE AUTHORIZED DPWH OFFICIALS OF DETAILED ENGINEERING SURVEYS AND DESIGN UNDERTAKEN BY THE CONSULTANT NEITHER DIMINISHES THE RESPONSIBILITY OF THE LATTER FOR THE TECHNICAL INTEGRITY OF THE SURVEYS AND DESIGN NOR TRANSFER ANY PART OF THAT RESPONSIBILITY TO THE APPROVING OFFICIALS.

THE DESIGN CONSULTANT SHALL BE HELD FULLY RESPONSIBLE FOR THE FAILURE OF THE FACILITIES/STRUCTURES DUE TO FAULTY DESIGN EXCEPT FOR THE CHANGES MADE WITHOUT THE CONFORMITY OF THE CONSULTANTS.

Architect
CONSULTANT

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| ADAMANTEM CONSULTING ENGINEERS Design. Innovate. Realize. | PREPARED: JULIE ANNE B. CAIMOL, STRUCTURAL ENGINEER | PROJECT NAME AND LOCATION: Continuing Rehabilitation and Upgrade of PCED buildings (Phase 4), UP Diliman, Quezon City | SHEET CONTENT: _ CRACK REPAIR ALONG RECTANGULAR PIPE SLEEVE | REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS NATIONAL CAPITAL REGION QUEZON CITY 2nd ENGINEERING DISTRICT 7th EDSA, DILIMAN, QUEZON CITY | REVIEWED AS TO DESIGN CONCEPT: MARK JAMES R. BERBOSO, CHIEF, PLANNING AND DESIGN DIVISION, DATE: | RECOMMENDING APPROVAL: GENE S. LEAÑO, ASSISTANT DISTRICT ENGINEER, DATE: | APPROVED: JOHNNY L. PROTESTA, JR., OIC-DISTRICT ENGINEER, DATE: | END USER: MA. JOY V. ABRENICA, EXECUTIVE DIRECTOR, PHILIPPINE CENTER FOR ECONOMIC DEVELOPMENT, DATE: | SET NO. RP 01 01 | SHEET NO. 01 01 |