

COORDINATION WORKSHOP-ANTALYA, TURKEY

25-28 MAY 2001

MAIN PROJECT TITLE: *SEISMIC VULNERABILITY ASSESSMENT AND RETROFITTING OF EXISTING REINFORCED CONCRETE BUILDINGS*

PROJECT 2: REHABILITATION METHODOLOGIES

1. System behavior improvement
 2. Member Strengthening
 3. Research with new materials
1. What must be the performance criterion for rehabilitation of the existing *RIO* residential structures?
 - Collapse prevention?
 - Life safety?
 - Repairable damage?
 2. What are the possible retrofitting techniques without disturbing the residents?
 - Strengthening of non-ductile frames by using
 - FRP or CFRP coated brick infill walls
 - Precast panels
 - Post tensioning
 - Steel bracings
 - External eccentric structural walls.
 3. What are the possible local strengthening techniques?
 4. What are the possible solutions for the insufficient lap-splice length?
 5. Strengthening of individual members by epoxy injection/jacketing/external post tensioning ties.
 6. Strengthening of connections - epoxy-steel partial jacketing.
 7. What are the possible new materials that can be used for the strengthening of the structure? FRP/CFRP for the confinement of *R/C* columns.

8. Shake table tests.

- What are the properties of the shake table(s)?
 - i. degrees of freedom
 - ii. maximum pay-load
 - iii. table area etc.
- To eliminate size effect, shake table tests on sub-assembly tests may be more feasible.
- Should the model shake test specimen be 1-bay 2-story non-ductile weak frame (the specimen that METU used for years).
- Tests also include member-strengthening aspect of the project.
- How many tests are required?