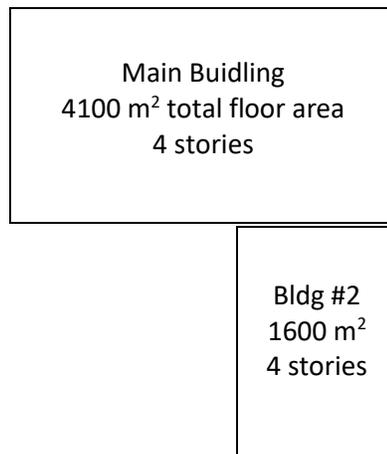


**STBA Junior College Performance Report**  
EERI Earthquake Reconnaissance Trip  
Padang, Indonesia

The STBA junior college teaches day and evening classes in the southwest section of Padang. Before the earthquake, the campus consisted of two four-story reinforced concrete moment-resisting frame buildings with unreinforced masonry infill walls. The two buildings were constructed in 2001 and are arranged as shown below.



**Figure 1: Layout of Buildings at the STBA Junior College**

As a result of the earthquake, all four floors of the main building collapsed while it was occupied by 15 students and staff. Only two of those 15 survived. The following image shows the state of the main building after the earthquake.



**Image 1: The Main Building of the STBA Junior College**

The unreinforced masonry infill walls crumbled in the other building, but its primary structural system suffered only moderate damage and remained intact.



**Image 2: Building #2 Suffered Moderate Damage in Columns and Infill Walls**

Inspection of the columns indicated that very small stirrups (generally 4-6 millimeters spaced at 6-12 inches) likely provided insufficient confinement to columns. As with other sites, all of the stirrups terminated with very short 90 degree hooks.



**Image 3: Column Confinement Generally Appeared to be Insufficient**

Bending failures were observed at the tops of the columns in both buildings with little damage to the beams, indicating a strong beam – weak column situation.



**Image 4: Strong Beam - Weak Column Situation in Building #2**

There was a seismic joint between the two buildings consisting of Styrofoam strips that were 1" thick, thereby suggesting that the joint would not have been capable of preventing pounding. The extent of the pounding issue could not be determined, but considering that pounding probably did occur suggests that additional torsion was imposed on the main building by Building #2.



**Image 5: The Styrofoam Seismic Joint was only 1" Thick**