Examining and treating the damaged buildings due to an earthquake

From lessons learned from the 2011 Tohoku earthquake, it is clear that the quick procurement of an emergent public shelter is very important in time of disaster. Structural engineers are required to estimate the seismic damage of structural components in buildings, and to judge whether these are able to be occupied or not. However, the visible damage can hardly be related with the damage to steel structural components, while crack width has been used as a clear damage index for reinforced concrete structures. Our research group aim to establish a visible damage index for quick damage estimation of steel structures and to develop a seismic repairing method.

Research on structural behavior and establishment of damage evaluation method for steel braced frames

Damage ealuation based on crack pattern and its width on the concrete foundation of exposed column base