

Procedures for Concrete and Masonry Cutting and Drilling

Michigan State University has developed the following procedures for all employees to limit the risk faced by building occupants and employees.

- 1 All concrete and masonry cutting and drilling shall be preceded by a 7-day notification to all building contacts if the building is occupied.
- 2 If this work is required to rectify an emergency an emergency notification shall be sent out as soon as possible and additional steps shall be taken to notify effected building occupants. Additional communication shall consist of postings around the building and verbal communication with each department head represented by building occupants.
- 3 A qualified engineer will conduct an on-site assessment before any cutting or drilling of a pre-tensioned or post-tensioned component or other structural component of a building or structure commences. The assessment will be documented and provided to the person who will carry out the work.
- 4 The responsible person for the project shall ensure substantial compliance with the requirements for exposure to Silica Dust. Substantial compliance will also be required for all other construction safety standards published by the State of Michigan or Federal OSHA.
- 5 Support equipment or vehicles shall be located to minimize the impact of noise in the building and the possibility of entraining carbon monoxide or other contaminants into any buildings.
- 6 Enclosures and ventilation if needed shall be designed to limit the distribution of dust, noise and any regulated contaminants. All temporary forced ventilation will be effected with the use of HEPA filtered negative air machines. MSU EHS will be consulted for design and air testing if any question remains as to the effectiveness of the setup.
- 7 The MSU project representative or employee shall be responsible for locating all utilities in the area to be cut. This part of the job is mandatory and shall be given appropriate attention. Minimally the responsible person shall review all available prints and consider structural scanning. The MSU representative or employee shall take necessary steps to isolate and lock out any energy sources that may be jeopardized by the cut to protect worker safety and avoid equipment damage. In some cases, utilities will need to be cut and relocated to conduct the work. The responsible person shall take steps to notify repairpersons in advance of the anticipated work that could disrupt services.
- 8 Areas under or adjacent to the area being cut shall be isolated to prevent others from entering a potentially dangerous area.
- 9 Responsible person shall inspect the area to ensure that no damage has occurred and that the area is cleaned to an acceptable level.

Concrete and Masonry Cutting & Drilling Checklist

1 7 Day Shutdown Notification / Emergency Shutdown Notification Circle one

Date Time and Method: _____

2 Name of qualified person stating that no structural damage will occur from the proposed work. _____

3 Was a notification sent? Yes / NO

4 Is work to be conducted during off hours? Yes / No

5 Were any utilities found in the area of the cut? Yes/ No

6 If yes to 5 was a proper LOTO conducted. Yes / No and all measures taken to ensure no loss of service or prompt repair Yes / No

7 Are areas under the cut and adjacent to the cut isolated? Yes / NO

8 Was the area inspected after the project and found to be clean and acceptable.