The above typical spray patterns have been generated with a sprinkler properly installed below a smooth, level, unvented ceiling. Minor water spray may exceed the pattern shown. Any deviation to the piping arrangement, deflector distance below the ceiling, water pressure, obstructions on the ceiling, ventilation, etc., may affect the spray pattern. Sprinklers are designed and approved to meet specific spray patterns and other criteria established by the testing agencies. The testing criteria and method has been established to meet specific installation rules. Deviation from recognized installation rules must be approved by the Authority Having Jurisdiction. Only full scale fire testing can establish if reasonable fire protection is being provided when recognized installation rules are not followed.