



DEFINITION:

THE GRAY FIRE RETARDANT COATING SHALL PROVIDE A MAXIMUM FLAME SPREAD RATING OF 25 (CLASS A) IN ACCORDANCE WITH STANDARD CAN/ULC-5102.

REVISIONS	PREP	CHKD	APPD	TITLE
REV: CHANGE: DATE:				<p>ENGINEERING SPECIFICATION METERING SYSTEMS, SINGLE PANEL, COMMUNICATION WIRING FOR ELECTRICAL ROOMS WITH COMMUNICATIONS EQUIPMENT CONSTRUCTION DETAIL</p>
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<p>PREP: G. MOLNAR CHKD: S. McNALLY APPD: C. MALONE</p>				<p>P. ENG. P. Eng.</p>
<p>DATE: 2016-12-07 SCALE: N.T.S. @ ANSIB</p>				<p>NO: MCS0110</p>
				<p>1 OF 1</p>
				<p>REV: 0</p>

NOTES:

- A. ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
- B. INSTALLATION SHALL MEET THE ONTARIO ELECTRICAL SAFETY CODE (OESC) AND HYDRO OTTAWA REQUIREMENTS.
- C. REFER TO HYDRO OTTAWA SPECIFICATIONS GCS0008, MCS0020, MCS0023 AND MCS0056 FOR DETAILS ON MCMS INSTALLATION REQUIREMENTS FOR NEW RESIDENTIAL BUILDINGS.
- D. ALL SECONDARY ELECTRICAL ROOMS SHALL BE SUBJECT TO THE FOLLOWING:
 - i. SHALL HAVE A MINIMUM CEILING HEIGHT OF 2130 [7'] FROM THE FINISHED FLOOR.
 - ii. SHALL HAVE A MINIMUM CONTINUOUS WALL SPACE OF 1850 [6' 1"] WIDE FOR THE SINGLE MCMS PANEL WITH A COMMUNICATION ENCLOSURE AND ASSOCIATED EQUIPMENT.
 - iii. THE WALL SPACE SHALL BE CLEAR, SAFE AND PROVIDE ADEQUATE WORKING SPACE TO ENSURE THE SAFETY OF HYDRO OTTAWA AND OTHER AUTHORISED PERSONNEL WHO MAY BE REQUIRED TO WORK ON THE METERING INSTALLATION.
 - iv. THERE SHALL BE A MINIMUM OF 1500 [5'] OF HORIZONTAL AND VERTICAL CLEARANCE IN FRONT OF THE MCMU PANEL, DISTRIBUTION PANEL, COMMUNICATION ENCLOSURE AND ASSOCIATED EQUIPMENT AND LOCAL DISCONNECT SWITCH (IF APPLICABLE) WITHIN THE ELECTRICAL ROOM.
 - v. THERE SHALL BE A MINIMUM OF 1000 [3' 4"] CLEARANCE FROM THE EDGE OF ALL OPERABLE DOORS ARE IN THE ENCLOSURES WITHIN IN THE ELECTRICAL ROOM WHILE THE DOORS ARE IN THE OPEN POSITION.
 - vi. SHALL HAVE ADEQUATE LIGHTING AT THE WORKING LEVEL, IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY (IES) STANDARDS.
 - vii. SHALL BE A HEATED ELECTRICAL ROOM.
- E. EACH DISTRIBUTION PANEL CONTAINING MCMS EQUIPMENT SHALL HAVE A LOCAL DISCONNECT SWITCH TO ISOLATE POWER FROM DISTRIBUTION PANEL AND SHALL HAVE MEANS TO LOCK THE BREAKER AND/OR SWITCH WITH A STANDARD HYDRO OTTAWA PADLOCK.
 - i. THE DISCONNECT MEANS SHALL BE ON OF THE FOLLOWING:
 - i. A BARRIER RATED MAIN SERVICE ENTRANCE BREAKER WITH THE DISTRIBUTION PANEL.
 - ii. A SEPARATE LOCKABLE DISCONNECT SWITCH IMMEDIATELY BEFORE AND WITHIN THE SAME ELECTRICAL ROOM AS THE DISTRIBUTION PANEL EQUIPPED WITH MCMS EQUIPMENT.
- F. SHALL PROCURE APPROPRIATELY SIZED DISTRIBUTION PANELS WITH SUFFICIENT SPACE TO MOUNT ALL THE NECESSARY MA CURRENT TRANSFORMERS REQUIRED AND THE PANEL SHALL BE ABLE TO PASS ESA FREE SPACE REQUIREMENTS WITH ALL MA CURRENT TRANSFORMERS INSTALLED.
 - i. THE DISTRIBUTION PANEL CABLE CHANNELS SHALL HAVE A MINIMUM WIDTH OF 250 [10"] BETWEEN THE CIRCUIT BREAKER MOUNTING RAILS AND THE SIDE OF THE DISTRIBUTION PANEL FOR MOUNTING THE MA CURRENT TRANSFORMERS.
 - ii. THE SUB-BREAKERS FEEDING THE INDIVIDUAL SUITES SHALL BE LOCKABLE WITH A STANDARD HYDRO OTTAWA LOCK, IN THE OPEN (OFF) POSITION AS PER HYDRO OTTAWA SPECIFICATION, GCS0008.
- G. THE MCMU PANEL AND COMMUNICATION ENCLOSURE SHALL BE INSTALLED WITHIN THE SAME SECONDARY ELECTRICAL ROOM AS THE DISTRIBUTION PANEL ASSOCIATED TO THE INDIVIDUAL SUITES BEING METERED. EACH SUITE METERED SHALL HAVE A DISTINCT AND SEPARATE WIRING AT THE METERED PANEL.
- H. THE MCMU PANEL SHALL BE POWERED FROM THE SAME DISTRIBUTION PANEL AS THE SUITES THAT THE MCMU PANEL IS METERING.
 - i. A SEPARATE BREAKER DEDICATED TO THE MCMU PANEL SHALL BE INSTALLED IN THE DISTRIBUTION PANEL COMPLETE WITH LOCKING PROVISIONS IN BOTH THE 'ON' AND 'OFF' POSITIONS, WHILE LOCKED IN THE 'ON' POSITION, THE LOCKING PROVISION SHALL ALLOW FOR TRIP FREE OPERATION UNDER FAULT CONDITIONS.
 - j. BREAKER LOCKS SHALL BE INSTALLED FOR EACH INDIVIDUAL BREAKER IN THE DISTRIBUTION PANEL LOCATED IN EACH ELECTRICAL ROOM WHERE THE RESIDENTIAL SUITES ARE BEING METERED BY MCMU PANELS.