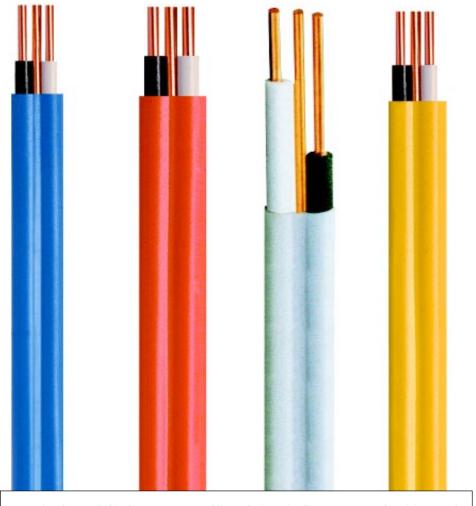
Colour Coding of NMD90 Cable

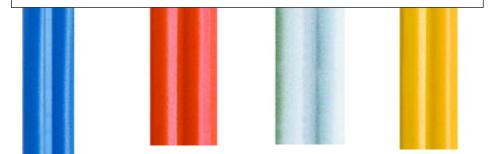
by: D. S. REITH, C.E.T. NEXANS CANADA INC.

Recently, Nexans Canada introduced colour coding to its line of non-metallic sheathed cables to enable easy identification of the various sizes commonly used in residential construction. These copper conductor cables are used mainly to distribute power to outlets, lights, electric ranges, dryers, and other equipment. This type of cable is commonly known by trade names such as *Romex* or *Canadex*, but the Canadian Standards Association type is NMD90, meaning non-metallic, dry location, 90 degree Celsius rated.

The safe installation of electrical systems is controlled by electrical codes







adopted by each Province or Territory. These codes generally follow the Canadian Electrical Code (CEC) with some amendments specific to each jurisdiction. When the 2002 edition of the CEC was issued, there was a new rule that required outlets in sleeping facilities of dwelling units in new installations to be protected by an arc-fault circuit interrupter (AFCI). An AFCI is different than a ground fault circuit interrupter (GFCI) in that an AFCI protects a circuit from arcing faults, while a GFCI protects against ground faults.

In another development, in Ontario it became mandatory as of January 1st, 2003, that in new construction, outlets installed within one metre of a kitchen sink be protected by a GFCI. This rule as well as several others may require that a different type of outlet that is protected by a 20ampere GFCI be used in this location.

During wiring of new homes, NMD cables are used to wire the residence, and at a later time, they are connected to the service or breaker panel. Many circuits are involved, and in order to easily identify the cables used for AFCI and kitchen sink GFCI outlets, Nexans now supplies NMD cable with coloured jackets. Cable for use with 15-ampere AFCI is supplied with a blue jacket, and the cable for use with a 20-ampere kitchen GFCI has a yellow jacket. As well, two conductor No. 14 AWG copper NMD used for other 15-ampere circuits is supplied with a white jacket, all No. 12 AWG copper for 20-ampere circuits has a yellow jacket, all No. 10 AWG copper for 30ampere circuits has an orange jacket, and cables for over 30 amperes have a white jacket.

The jacket colour coding is not required by any electrical code or by CSA product requirements. However, Nexans supplies the colour-coded products as an aid for installers and inspectors in identifying cables used to supply the two special types of circuits mentioned above and to indicate copper conductor size. In doing so Nexans makes the job of cable identification quick and accurate for the contractor and inspector.

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