



# BUILDING WIRE SPECIFICATIONS **ROMEX® SIM***pull*® **NMD90**

#### COPPER CONDUCTORS

• 300 VOLTS / -25°C MIN, 90°C MAX

#### **APPLICATIONS**

Southwire's Romex<sup>®</sup> SIM*pull*<sup>®</sup> NMD90 cables may be used for both exposed work in dry locations or concealed work in dry or damp locations.

The maximum allowable conductor temperature is 90°C. The minimum recommended installation temperature is -25°C for two-conductor cables and -10°C for three-conductor cables (with suitable handling procedures). Material should be properly stored above 0°C for 24 hours prior to installation. The maximum voltage rating for all intended applications is 300 volts. Consult the Canadian Electrical Code<sup>1</sup> for further information related to applications.

# **CODES / STANDARDS**

Romex<sup>®</sup> SIM*pull*<sup>®</sup> NMD90 cables meet or exceed the following requirements:

- ASTM
- CSA C22.2 No. 48 (non-metallic sheathed cable)
- Canadian Electrical Code<sup>1</sup>

# SAMPLE PRINT LEGEND

SOUTHWIRE MASTER-DESIGN CSA LL90458 12 AWG 2 CDRS BLACK/WHITE NMD90 NYLON ROMEX(R) BRAND SIMpull (TM) (-25C) 300 VOLTS FT1 COVERED & MADE UNDER U.S. PAT. NOS 7557301 & 7411129. [Jacket Colour is yellow]

#### • PVC / NYLON INSULATION • PVC JACKET

### CONSTRUCTION

Southwire's Romex<sup>®</sup> SIM*pull*<sup>®</sup> NMD90 cables are available as two- or three-conductor cables with a bare grounding conductor. It is manufactured using annealed (soft) copper conductors—compressed standing for stranded conductors; a heat-resistant thermoplastic polyvinyl chloride (PVC) insulation and nylon jacket for the individual conductors with a PVC jacket for the overall construction.

Conductors are white, black and red (for 3 conductor cables). Cable jackets are colour coded by size for quick identification in the Table below:

Number of	Size (AWG)									
Conductors	14	12	10	8	6					
2				$\bigcirc$	$\bigcirc$					
3	$\bigcirc$			$\bigcirc$	$\bigcirc$					

JACKET COLOUR CODE - Typical Application Guide

**End View** 

- WHITE General Residential Wiring
- RED 2 Black and Red conductors 208V-240V Circuits (no neutral)
  ORANGE No. 10 AWG General Residential Wiring
- YELLOW No. 12 AWG General Residential Wiring
- YELLOW No. 12 AWG General Residential Wiring
  BLUE No. 14 AWG 2 black and white conductors 120V Arc Fault Circuit Interrupter Applications

Romex<sup>®</sup> SIM*pull*<sup>®</sup> NMD90 conductors feature SIM Technology jackets which reduces the coefficient of friction, allowing cables to be installed without external lubricants, resulting in reduced labour and materials costs.



Conductor		Insulation Thickness		Ground Wire		Approximate Jacket Thickness		Approximate Cable Dimensions		Approximate Net Cable Weight		Allowable Ampacities <sup>+</sup>	
Size (AWG)	Number of Conductors	Number of Strands	inches	mm	Size (AWG)	Number of Strands	inches	mm	inches	mm	lb/1000ft	kg/km	30°C Ambient
14	2	1	0.034	0.86	14	1	0.030	0.76	0.388 x 0.192	9.86 x 4.88	68	101	25*
12	2	1	0.034	0.86	14	1	0.030	0.76	0.422 x 0.209	10.71 x 5.30	86	129	30*
10	2	1	0.034	0.86	12	1	0.030	0.76	0.481 x 0.230	12.21 x 5.84	122	182	40*
8	2	7	0.040	1.02	10	1	0.045	1.14	0.636 x 0.312	16.15 x 7.92	208	310	55
6	2	7	0.051	1.30	8	7	0.045	1.14	0.792 x 0.370	20.12 x 9.40	315	468	75
14	3	1	0.034	0.86	14	1	0.030	0.76	0.345	8.77	86	128	25*
12	3	1	0.034	0.86	14	1	0.030	0.76	0.381	9.69	114	169	30*
10	3	1	0.034	0.86	12	1	0.030	0.76	0.427	10.85	163	242	40*
8	3	7	0.040	1.02	10	1	0.045	1.14	0.570	14.47	275	408	55
6	3	7	0.051	1.30	8	7	0.045	1.14	0.695	17.65	421	627	75
3	3	7	0.051	1.30	6	7	0.080	2.03	0.925	23.48	799	1189	115

<sup>1</sup> 2015 Canadian Electrical Code Part I

**SPECIFICATIONS** 

† Allowable ampacities are for general use as specified by the Canadian Electrical Code, 2015, Table 2.

\* In accordance with the 2015 Canadian Electrical Code Part I Rule 14-104(2)

