Southwire 28828223

Southwire Romex SIMpull 12/2 W/G NMB Indoor Electrical Cable - 100ft Coil (Model 28828223) Instruction Manual

1. Introduction

This manual provides essential information for the safe and effective use of the Southwire Romex SIMpull 12/2 W/G NMB Indoor Electrical Cable. This product is designed for general wiring applications in residential and commercial settings. Please read all instructions carefully before installation and retain this manual for future reference.

2. Product Overview

The Southwire Romex SIMpull 12/2 W/G NMB cable is a nonmetallic-sheathed electrical cable featuring two 12-gauge copper conductors (one black, one white) and one bare ground wire. It is encased in a durable yellow PVC jacket with patented SIMpull technology for easier handling. This cable is rated for 600 volts and is suitable for indoor, dry locations.



Image: Detailed cross-section of the Southwire Romex SIMpull 12/2 W/G NMB cable, illustrating the internal copper conductors (black, white, and bare ground) and the protective yellow outer jacket.



Image: A graphic representation of the Southwire Romex SIMpull cable, emphasizing its key features such as fast pulling, easy stripping, tear resistance, and reduced burn-through, designed for efficient installation.

3. Safety Information

WARNING: Electrical work can be hazardous. Improper installation can result in fire, electric shock, or personal injury. Always consult with a qualified electrician and ensure compliance with all local and national electrical codes, including the National Electrical Code (NEC).

- **Professional Installation Recommended:** If you are not experienced with electrical wiring, it is strongly recommended to hire a licensed electrician for installation.
- **Power Disconnection:** Always disconnect power at the main service panel before performing any electrical work. Verify power is off using a voltage tester.
- **Intended Use:** This cable is for indoor, dry locations only. Do not install in wet or damp environments.
- **Voltage Rating:** Do not exceed the 600-volt rating of this cable.
- **Temperature Limits:** While the cable is rated for 90°C, its ampacity (current carrying capacity) is limited to that for 60°C conductors, as specified by the NEC.
- **Damage Inspection:** Inspect the cable for any damage before and during installation. Do not use damaged cable.

4. Specifications

Feature	Detail
Brand	Southwire
Model Number	28828223
Cable Type	NM-B (Nonmetallic-Sheathed)
Wire Gauge	12 AWG
Number of Conductors	2 with Ground
Conductor Material	Copper
Insulation Material	Nylon, Polyvinyl Chloride (PVC)
Voltage Rating	600 Volts
Temperature Rating	90°C (Ampacity limited to 60°C)
Color	Yellow
Length	100 feet
Application	Indoor, Dry Locations

5. Installation Guidelines

The Southwire Romex SIMpull NM-B cable is suitable for both exposed and concealed work in normally dry locations. It is commonly used for branch circuits supplying outlets, switches, and other loads in residential and commercial buildings.

5.1 Preparation

- Ensure all necessary tools and safety equipment are available.
- Verify that the circuit breaker for the area of work is turned off.
- Plan your cable runs to minimize bends and avoid sharp edges.

5.2 Running the Cable

The SIMpull jacket technology allows for easier pulling through conduits and drilled holes in studs. Always ensure proper support and protection for the cable as per local electrical codes.



Image: Southwire Romex SIMpull cable neatly routed through pre-drilled holes in wooden studs, demonstrating typical installation within wall framing.

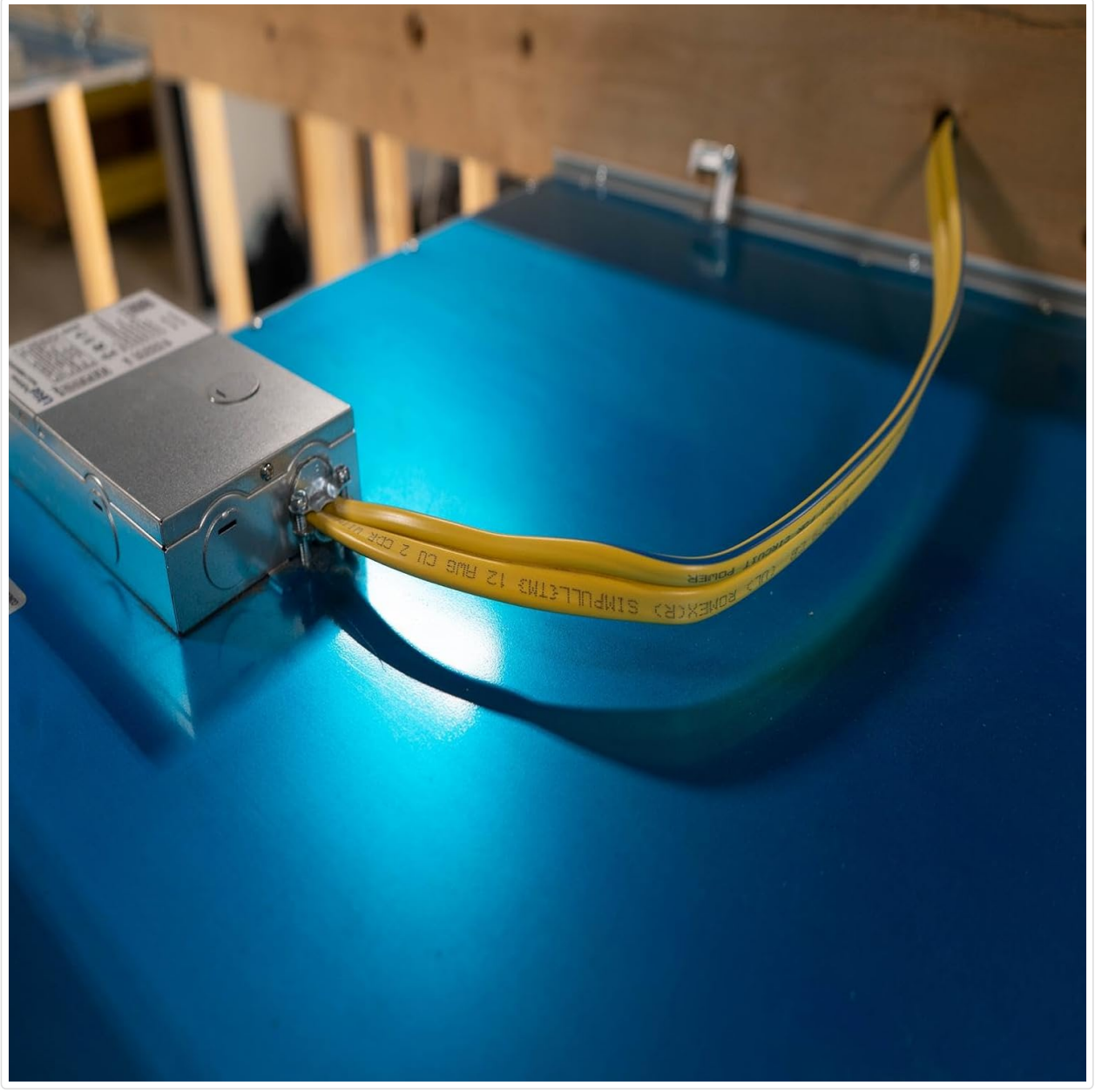


Image: An installer pulling Southwire Romex SIMpull cable into an electrical junction box, showcasing the cable's flexibility and ease of handling during installation.

- **Through Studs/Joists:** When passing through wood studs or joists, ensure holes are drilled at least 1.25 inches from the edge, or protect the cable with a steel plate.
- **Securing Cable:** Secure the cable with appropriate staples or straps within 12 inches of an electrical box and at intervals not exceeding 4.5 feet along the run.
- **Masonry Walls:** NM-B cable may be run in air voids of masonry block or tile walls, provided such walls are not wet or damp locations.

5.3 Connections

When connecting the cable to devices or junction boxes, ensure all connections are tight and secure. Strip the outer jacket and individual conductor insulation carefully to avoid damaging the copper wires.

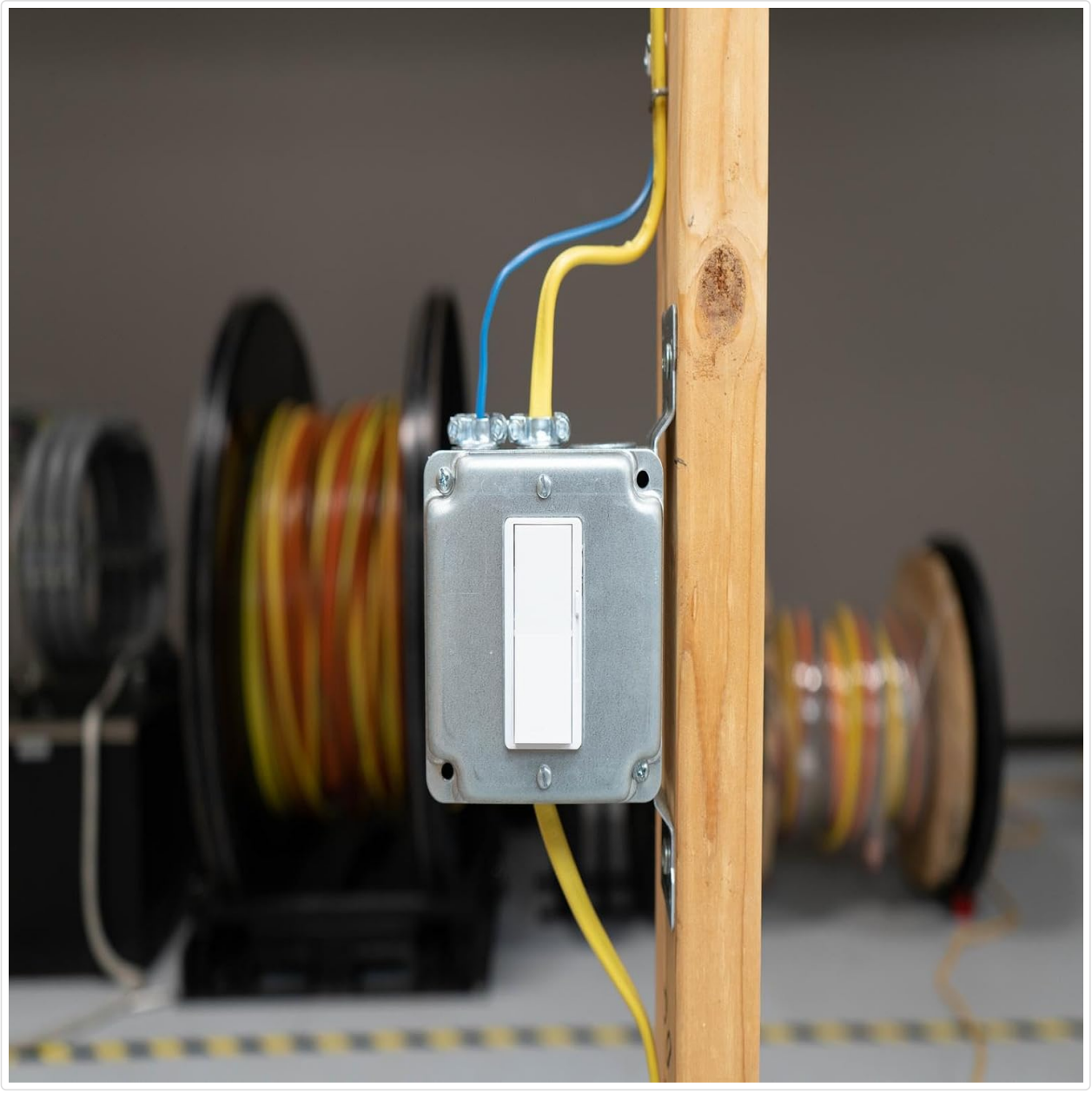


Image: Southwire Romex SIMpull cable conductors properly connected to a light switch within a metal electrical box, illustrating a standard wiring connection.

- Connect the bare copper ground wire to the grounding terminal of the device or box.
- Connect the black (hot) wire to the appropriate terminal.
- Connect the white (neutral) wire to the appropriate terminal.
- Ensure no bare wires are exposed outside of terminals or wire nuts.

6. Operating Considerations

Once installed correctly, the Southwire Romex SIMpull 12/2 W/G NMB cable operates as a fundamental component of your electrical system. Its primary function is to safely transmit electrical power to connected devices and fixtures.

- **Load Capacity:** Ensure that the total electrical load on the circuit does not exceed the ampacity rating of the 12 AWG wire (typically 20 amps for 60°C rated terminals). Overloading can cause overheating and fire hazards.
- **Environmental Conditions:** This cable is designed for dry, indoor environments. Exposure to moisture, direct sunlight, or extreme temperatures outside its specified range can compromise its integrity and

safety.

7. Maintenance

Electrical cables generally require minimal maintenance once properly installed. However, periodic inspection can help ensure continued safety and performance.

- **Visual Inspection:** Periodically inspect exposed sections of the cable for any signs of physical damage, fraying, or discoloration.
- **Environmental Changes:** If the environmental conditions of the installation area change (e.g., becoming damp), consult an electrician to assess if the cable remains suitable for the new conditions.
- **Avoid Damage:** Prevent physical damage to the cable from sharp objects, excessive bending, or crushing.

8. Troubleshooting

If you experience electrical issues, it is crucial to prioritize safety. Do not attempt to diagnose or repair complex electrical problems without proper training and tools.

- **Circuit Breaker Tripping:** If a circuit breaker frequently trips, it indicates an overload or a short circuit. Do not repeatedly reset the breaker without identifying and resolving the underlying issue.
- **Loss of Power:** Check the circuit breaker panel. If the breaker is tripped, reset it once. If it trips again, discontinue use and seek professional assistance.
- **Burning Smell or Smoke:** Immediately disconnect power to the affected area at the main service panel and contact emergency services or a qualified electrician.

For any electrical concerns, always consult a qualified and licensed electrician.

9. Warranty and Support

Southwire products are manufactured to high-quality standards. For information regarding product warranty, technical support, or customer service, please refer to the official Southwire website or contact their customer support directly. Keep your purchase receipt as proof of purchase.

Southwire Contact Information:

- **Website:** www.southwire.com
- **Customer Service:** Refer to the website for current contact methods (phone, email, etc.).

© 2023 Southwire. All rights reserved. Information in this manual is subject to change without notice.