

# **Advantage ICF PIB 223**

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**Electrical Wire  
Type Used in  
Advantage ICF  
System**

# Advantage ICF System®

## Product Information Bulletin

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### Electrical Wire Types Used with Advantage ICF System®

The purpose of this bulletin is to review electrical wire types used when constructing walls with the **Advantage ICF System**. For more detail on wiring requirements for **Advantage ICF System** walls construction refer to the **Advantage** installation manual.

In the US, NFPA 70: National Electrical Code®, Article 334, defines the range of uses for Type NM-B cable, non-metallic wire as being for both exposed and concealed work in normally dry locations at temperatures not to exceed 90 °C (194 °F). Conductor temperatures under normal loads will not exceed 60 °C (140°F), due to the restrictions on amperage loading and breaker sensitivity. Type NM-B cable meets or exceeds UL Standard 83, UL Standard 719, Federal Specification A-A-59544 and requirements of the National Electrical Code.

In Canada, Canadian Electrical Code, Part I, Table 19, defines the range of uses for Type NMD90 cable, non-metallic wire. The Canadian Electrical Code permits the use of Type NMD90 cable for dry locations at a maximum temperature of 90 °C (194 °F). Conductor temperatures under normal loads will not exceed 60 °C (140°F), due to the restrictions on amperage loading and breaker sensitivity. The Canadian Electrical Code permits the use of Type NMD90 in both exposed and concealed work for one, two or multifamily dwellings or other structures not exceeding three floors. Type NMD90 cable meets or exceeds requirements of CSA C22.2.

Type NM-B and NMD90 cable are suitable for use in the **Advantage ICF System** where the conductor temperatures will not exceed 60 °C (140 °F) under normal conditions due to restrictions on amperage loading. **However, in all cases users must ensure that applicable local electrical code requirements are followed for intended end-use application.**

“Romex” is one brand name for non-metallic sheathed cable (Type NM-B in USA and Type NMD90 in Canada) used for residential and light commercial structures.