Alcan Cable's interlocked aluminum armor Type MC Cable is designed for above-ground applications. The cable is also available with a jacket over the armor, listed for direct burial, for application in cable tray and for sunlight resistance. STABILOY® MC meets the requirements of UL Standard #1569, Metal-Clad Cables. Insulated conductors within the cable meet the requirements of UL-44, Type XHHW-2. STABILOY® MC Cable is approved for use in accordance with applicable portions of the National Electrical Code. STABILOY® alloy conductor is recognized by ASTM in Standards B800 and B801.

Product Features
The distinctive features unique to STABILOY® MC Cable provide a significant savings in installation cost and time. It is quicker and easier to install than conventional pipe and wire and is the product of choice for many electrical contractors.

STABILOY® MC Cable is designed to your advantage...

• All-in-one assembly offers one-step installation, which dramatically reduces installation time.
• Strong, lightweight, aluminum alloy armor weighs less than steel armor and is easier to strip back.
• Bends around corners, which alleviates the need for an elbow.
• Not limited to 360° bend rule, which eliminates the need for pull boxes.
• Environmentally friendly with a lead-free and cadmium-free PVC jacket. Suitable for wet locations, direct burial, encased in concrete and other uses per NEC.
• Overall flexibility not available with a conduit.
• Factory tested engineered product that protects conductors from damage during installation.
• Exceeds requirements of the NEC, as well as the UL Standards.

This catalog is intended to provide introductory technical data to aid the correct selection of wire and cable for permanent installation. Wire and cable products supplied by Alcan comply with the codes, standards and product specifications as indicated in this catalog. Weights and measurements are subject to manufacturing tolerances and product design changes. Consequently, Alcan does not accept responsibility for costs incurred by a purchaser as a result of weights and measurements not conforming exactly to those indicated.
Description
STABILOY® MC Cable’s construction consists of either three or four insulated phase-identified conductors plus a bare equipment-grounding conductor inside interlocked aluminum alloy armor. All conductors are STABILOY® (AA-8030 electrical grade alloy) with type XHHW-2 insulation. STABILOY® MC Cable is a UL Listed assembly.

Marking
The cable assembly is identified with a marker tape placed under the wrapping tape. The legend on the marker tape includes, ALCAN TYPE MC-ST1 STABILOY® AA-8030 AL 600 V (UL) FOR CT USE (NOT “ST1” ON JACKETED MC UNLESS SO MARKED) NON ANCE “SEQUENTIAL FOOTAGE”. STABILOY® MC Cable with jacket is available upon request.

Applications
Feeder size STABILOY® MC Cable is a better alternative to the traditional pipe and wire method because it dramatically reduces installation time. STABILOY® MC Cable is approved for use in many applications including cable tray, power lighting and signal circuits as well as in hazardous locations as permitted in articles 501, 502, 503 and 504. Ideal applications include:

- Hotels
- Casinos
- Condominiums/ Apartments/Loft Buildings
- Sports Arenas
- Hospitals
- Commercial Buildings
- Schools
- Renovations

Approved for use in the following locations
Without PVC Jacket over Armor:
- For services, feeders and branch circuits
- For power lighting and signal circuits
- Indoors
- Where exposed or concealed
- In cable tray
- As open runs of cable
- In hazardous locations
- In dry locations and embedded in plaster finish on brick or other masonry except in damp or wet conditions
- Interior temporary power
Jacketed STABILOY® MC Cable

With the added durability of the PVC jacket, Jacketed STABILOY® MC Cable is a better choice, for some applications. A prime example is for utilization in single phase feeder applications within multi-family residential and similar commercial constructions. Additional applications for STABILOY® MC Cable with PVC jacket over armor include:

- Outdoors
- In wet locations (Type XHHW-2 conductors)
- Direct buried
- Encased in concrete
- Exterior/Interior temporary power
- As aerial cable on a messenger
- Hazardous locations

Alcan Cable stocks a selection of sizes of Jacketed and Unjacketed STABILOY® MC Cable for immediate availability.

Through-Penetration Fire Stop Systems

**UL SYSTEMS #W-L-3041**
- **Fire Rating:** 2 hours
- **Temperature Rating:** 1/2 hour
- **Assembly:** Wall assembly, 2 hour gypsum wall board
- **Penetrating Item:** STABILOY® Type MC Cable - with or without PVC jacket
- **Firestop Product:** 3M Company Fire Stop Sealant Types FB-2000 or FB 2000+ as applicable

**UL SYSTEMS #C-AJ-3041**
- **Fire Rating:** 3 hours
- **Temperature Rating:** 1/2 hour
- **Assembly:** Floor or wall assembly, 4 1/2” light or normal weight concrete or block wall
- **Penetrating Item:** STABILOY® Type MC Cable - with or without PVC jacket
- **Firestop Product:** 3M Company Fire Stop Sealant types FB-2000, FB-2000+, or FB 2003 (floors only) as applicable
Installation and Complementary Accessories

Fittings
STABILOY® MC Cable works well with most fittings. The following is a list of suggested fitting manufacturers:

- ADALET PLM Bridgeport
- American Connectors Crouse-Hinds
- Appleton O-Z Gedney
- Arlington Thomas & Betts

Please consult your local Alcan Manufacturer Representative or an Alcan Field Application Engineer for more information on installation methods and accessories.

Minimum Acceptable Bend Radius for Interlocked Armor
Minimum radius = (7) x (diameter of metallic sheath)

Example:
STABILOY® MC - 750 MCM - 4 conductor with 3/0 ground
- Overall diameter of metallic sheath = 2.93”
- Minimum bend radius = (7) x (2.93”) = 20.51”
- Minimum diameter of wheel = (2)(20.51”) = 41.02”

Use wheel with 42” diameter or larger
### Unique from Alcan Cable

#### Three Conductor with Ground

<table>
<thead>
<tr>
<th>CONDUCTOR SIZE (AWG/kcmil)</th>
<th>DIAMETER (Inches)</th>
<th>LENGTH (Feet)</th>
<th>REEL SIZE</th>
<th>WEIGHT (LBS/MFT)</th>
<th>RATING OF OC DEVICE (75°C) (AMP)</th>
<th>RATED AMPCASITY (75°C) (AMP)</th>
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<tbody>
<tr>
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#### Four Conductor with Ground

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<th>REEL SIZE</th>
<th>WEIGHT (LBS/MFT)</th>
<th>RATING OF OC DEVICE (75°C) (AMP)</th>
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#### Four Conductor with Ground (For Parallel Runs)

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<td></td>
<td>750-750-750-750-3/0</td>
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<tr>
<td></td>
<td>750-750-750-750-750</td>
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</table>

1. Sizes shown in bold are in-stock items. Lengths cut to order. Other sizes and configurations available upon request.
2. Diameter of conductor assembly without armor, Diameter of cable with armor, and Diameter of cable with PVC jacket over armor.
3. The rating of the overcurrent device shown above is in accordance with the NEC. See 240-3 and 240-6. Also, see 110.14 and Table 310.16 of the NEC.