

Meetinghouse Standard Plan Committee

Meetinghouse Facilities Department

MSPC Decisions Affecting North America Operations—No. 3

MSPC Meeting: 26 November 2012

Notification to Field: 15 January 2013

Item 1: Condenser Theft Protection

Copper theft at Church owned and operated buildings has increased nationwide over the past several years. The target of these thefts is usually the piping to and coils in the HVAC condensing units. The value of the copper for recycling is relatively small, but replacement costs per incident can be thousands of dollars.

Copper thefts are more common in some areas of the country than others. The cost of installing theft protection devices broadly across all Church properties is prohibitive and exceeds likely benefits. Facilities managers should focus on areas of risk. Once theft occurs at a building, if steps are not taken to deter further thefts the building is subject to repeated incidents. Depending on the density of Church buildings in a city or area there may be some areas which are higher risk than others. Risk Management and Church Security have identified by city the percentage of meetinghouses which have had thefts.

The philosophy of MFD is to deter theft in high risk areas, and prevent repeated thefts in medium and low risk areas. Architecture, Engineering and Construction (AEC) has worked with Facilities Managers to install a variety of deterrents at several test locations, and have monitored their effectiveness in deterring theft incidents.

Extent of deterrent installation:

- **High Risk Areas:** If 40% or more of meetinghouses in a city or area of a city has had copper theft incidents, all facilities in that city or area should have deterrents installed.
- **Medium Risk Areas:** If between 15% and 40% of meetinghouses in a city or area of a city have had copper theft incidents, facilities which have had theft incidents and all of the facilities in the same general geographic area should have deterrents installed.
- **Low Risk Areas:** If less than 15% of meetinghouses in a city or area of a city have had copper theft incidents, only the facility which has experienced theft should have deterrents installed. Once multiple thefts have occurred other facilities in the same general geographic area should have deterrents installed.
- **No Risk Areas:** If there have not been any copper theft incidents, there is no justification to install deterrents.

Twenty-two of the states in the US have had theft incidents, but some of these states have had only one or two incidents to date. Other states and specific cities or areas in those states have experienced more numerous thefts. FMs should install locks on any gates to mechanical enclosures, whether thefts have occurred or not.

Deterrents:

Recommended deterrents consist of:

1. Installing power loss sensors (one per condensing unit electrical disconnect or one per each enclosure load center on newer buildings) and refrigerant pressure loss sensors (one per condensing unit), with a Siren /Horn combination at each mechanical enclosure. The alarm system will send alarm once a power and/or pressure loss is detected. Install an alarm panel for each facility, with a built-in dialer to

the Church's Global Security Operations Center (GSOC). The facilities manager should contact Cindy Peterson (801-240-3349 PetersonCL@ldschurch.org) with Church security to start the Church Security Process.

2. In addition to Item 1, installing metal cages over each mechanical unit, only in remote areas where response time upon an alarm may be longer, or in other extreme areas where further deterrent is desirable. Cages are expensive.

It has been determined that security cameras and motion detectors are expensive, time consuming to monitor, and unreliable relative to false alarms and deterring theft, and they should not be installed.

Authorization for Deterrent Installation:

REGIONAL FACILITIES MANAGERS ARE TO BE INVOLVED IN ALL ASSESSMENT OF RISK AND APPROVE THE INSTALLATION OF ANY NEEDED DETERRENTS:

- Existing buildings. RFMs and FMs should assess the risk level and install appropriate deterrents.
- New meetinghouse projects. RFMs and FMs should assess the risk level of the site where the new meetinghouse is to be constructed, and upon the RFM's instruction the Project Manager shall include the appropriate deterrents as part of a new building project.

Upon request, AEC will provide information regarding the installation of power and pressure loss sensors, and running wire for the strobe/siren/alarm panel. Contact Max Gandy, 801-240-4675, mgandy@ldschurch.org.

Vendors for Recommended Deterrents

AEC/Purchasing has negotiated preferred pricing of the recommended deterrents with two vendors identified below. Cost will depend on the number of condensing units, mechanical enclosures, etc.

Power and Pressure Loss Sensors, Strobe/Siren/Alarm Panels

In addition to items listed below FMs should install a "Protected by Electronic Automatic Alarm System" decal sticker on the top or side of each condensing unit, the top of each line set cover, and on each electrical disconnect. Cost of the stickers is 70 cents each.

Intermountain Lock and Security

Item	Cost
Electrical Load Center Tamper Switch (one per enclosure for Heritage 09T, Independence and some older buildings with one load center for each enclosure)	\$ 3 each
Electrical Relay Power Loss Sensor (one per condensing unit when there is electrical disconnect for each unit)	\$ 16.50 each
Refrigerant Low Pressure Sensor with screw-on Tee (one for each condensing unit)	\$ 32 each
Siren/Blue Strobe Combo (120dB one for each mechanical enclosure/area). Siren timed, Strobe stays on until reset.	\$ 58 each
Power supply with back-up battery for more than 2 Sirens / Strobes	\$ 32
Alarm Panel, Transformer, Phone Jack and Cord, Key Pad and Dialer, Siren and Strobe control, including programming (one per building)	\$ 131.50 each
Installation of Alarm Panel and components (varies on complexity of wiring and number of components installed; Heritage, Legacy, Heritage 09T have ease of installation access)	\$500 to \$6,000 +/-

Contact Information: Intermountain Lock and Security Supply
 Marc Zaharias; 801-556-8986 cell, 801-486-0079 desk, marc.zaharias@imlss.com
 3105 South Main Street, Salt Lake City, UT 84115

Atkinson

Item	Cost
Electrical Load Center Tamper Switch (one per enclosure for Heritage 09T, Independence and some older buildings with one load center for each enclosure)	\$ 5.80 each
Electrical Relay Power Loss Sensor (one per condensing unit when there is electrical disconnect for each unit)	\$ 9.90 each
Refrigerant Low Pressure Sensor with screw-on Tee (one for each condensing unit)	\$ 25.63 each
Siren/Blue Strobe Combo (120dB one for each mechanical enclosure/area). Siren timed, Strobe stays on until reset.	\$ 17.60 each
Power supply with back-up battery for more than 2 Sirens / Strobes	\$ 59.05
Alarm Panel, Transformer, Phone Jack and Cord, Key Pad and Dialer, Siren and Strobe control, including programming (one per building)	\$261.50 each
Installation of Alarm Panel and components (varies on complexity of wiring and # components installed; Heritage, Legacy, Heritage 09T have ease of installation access)	\$500 to \$6,000 +/-

Contact Information: Atkinson Electronics Inc. (AEI)
 Matt Klepacz. 801-835-3327 cell, 801-261-3600 office , Matk@atkinsonel.com
 14 West Vine Street, Murray, UT 84107.

Protective Metal Cages

Cost will depend on the number and size of the condensing units.

Company Name	Contact Information	Location/Website	Notes	Cost
<i>Property Armor</i>	Robert Mitchell 904-356-0092	Jacksonville, FL www.PropertyArmor.net	12-15 day lead time plus transit time Freight extra	\$ 428 each
<i>Protective Cages</i>	Jeff Osborne 205-441-7797	Foley, AL www.protectivecages.com	12-15 day lead time plus transit time Freight extra	\$ 315-325 each
<i>Air Cold (Ferguson)</i>	Rich Saltmarsh 801-956-3580	Salt Lake City, UT www.ferguson.com	2 weeks or less FOB Salt Lake City	\$ 378 each
<i>AC Cages Arizona</i>	Nason Benson 602-778-1111	Phoenix, AZ www.accagesaz.com	Freight extra Ships anywhere in U.S.	\$400 each
<i>Cage King LLC</i>	Michael Christopher 816-331-6911	Belton, MO www.cageking.net	Freight extra Order direct from authorized dealer Ships overnight	\$ 400-525 each
<i>AC Asset Protection</i>	Tom Gurrola 702-727-4071	Las Vegas, NV Southern Nevada only	Pricing includes installation	\$ 385 each
<i>ESV Group, Inc.</i>	Anthony Verchesm 800-590-4378	Upland, CA California market	Custom made, 7-10 days Pricing includes installation	\$ 450 each +/-

FM Group or Contractor can install. Cost to install = \$50-100 per unit +/-.

For assistance, contact Mark Meyers, AEC Purchasing, 801-240-8032, meyersmj@ldschurch.org.