

Item	Page	Model Number & Description	Recommended Rough-In
Notifier NFS-320 Fire Alarm System			At: Interdisciplinary Science Building Garden Ave. Webster Groves, MO 63119
1		NFS-320 Notifier NFS-320 Intelligent Fire Alarm Panel, 120 VAC, Black Includes one SLC Loop (up to 318 Devices), Back-lit 80 Character Display, System and Programming Keypad and 6 Amp Power Supply, in Black Cabinet.	Semi-flush or surface mount cabinet measures 18-7/8"W x 18-1/2"H x 5-7/8"D. Requires 120VAC dedicated emergency circuit and ground, locate as shown on the plans.
2		PS-12260F2 Tech Electronics, Inc. Battery; 12 Volt, 26AH	CHECK> Mounts in Cabinet supplied by Tech Electronics.
3		411UDAC Notifier Four Channel, Dual Line, Stand-Alone Digital Communicator Transmitter, 1 Amp NAC Includes fifteen selectable transmission formats for compatibility with virtually all Digital Alarm Communicator Receivers.	Digital Communicator includes cabinet, for surface mounting, with key lockable door. 120VAC Power & two (2) Loop start business type telephone lines are required.
4		B215 Tech Electronics, Inc. Cord, Base, 8 Pin, Mod-Mod, 7', Silver	Cable
5		B280 Tech Electronics, Inc. Block, Connector, RJ31X, 8 Pin, Mod	CHECK> Mount on backboard within 6 ft. of Digital Communicator. Connector will have priority and seize the phone line if in use.
6		FCPS-24S6 Notifier Remote Power Supply, 24VDC, 6 AMP Provides regulated and filtered 24VDC power to drive four notification appliance circuits configured as either four Class B (style Y) or Class A (Style Z, with ZNAC-4 option module). The four outputs may be configured as all resettable or non-resettable, or two resettable or non-resettable power output circuits. Contains a battery charger capable of charging up to 18AH batteries.	Self contained in lockable cabinet (15"H x 14.5"W x 2.75"D) 120VAC circuit is required.

X = CAUTION! Item NOT supported.**N/E = NO EXHIBIT**

8/31/2016

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Interdisciplinary Science Building**

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Item	Page	Model Number & Description	Recommended Rough-In
7		FCM-1 Notifier Addressable Control Module for Supervised Circuits	4" square box 2-1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
8		PS-1270 Tech Electronics, Inc. Battery; 12 Volt, 7 Amp Hour	CHECK> Mounts in Cabinet supplied by Tech Electronics.
9		FMM-101 Notifier Addressable Mini Module	Mount in same box as device being monitored. Module measures 1-1/2"x3"x1-1/2. Ensure ample space is available or install module in a separate box with a blank cover.
10		PSN-106B Potter Electric Signal Company, LLC Power Supply, 24VDC, 10Amp, Black	Self-Contained in Lockable Cabinet (16.75"H x 16.25"W x 3.5"D) 120VAC Circuit is Required.
11		PS-1270 Tech Electronics, Inc. Battery; 12 Volt, 7 Amp Hour	CHECK> Mounts in Cabinet supplied by Tech Electronics.
12		FCM-1 Notifier Addressable Control Module for Supervised Circuits	4" square box 2-1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
13		LCD2-80 Notifier Annunciator, 80 Character, Backlit LCD Display	Mounts in ABS-1TB back box.
14		AKS-1B Notifier Annunciator Keyswitch. Black Label with White Letters	Mounts in front of annunciator.
15		ABF-1B Notifier Annunciator Flush Box. Mounts One Annunciator Module	Flush box measures 9-15/16"H x 4-5/8"W x 2- 1/2"D.

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16		NBG-12LX Notifier Addressable Pull Station Includes built-in LED which is visible through the handle of the station.	4" Square box with a two gang frame. If surface mounting is required, use SB-10 box.
17		FSP-851 Notifier Addressable Smoke Detector, PhotoElectric, Low-Profile	Mounts on B210LP base.
18		FST-851 Notifier Addressable Detector, Fixed, Heat 135D	Mounts on B210LP base.
19		B210LP Notifier Detector Base, Intelligent, Flanged, 6", Low Profile	4" Octagon box 2-1/8" deep.
20		CO1224T Notifier Carbon Monoxide Detector, 4 Wire	4" square box 2-1/8" deep with one gang frame.
21		FMM-101 Notifier Addressable Mini Module to Monitor CO Detector	Mount in same box as device being monitored. Module measures 1-1/2"x3"x1-1/2. Ensure ample space is available or install module in a separate box with a blank cover.
22		DNR System Sensor Duct Smoke Detector Housing, Intelligent, Non-Relay, Photoelectric, Low Flow	Mounts on air duct. See Mfr's recommendations for mounting details and air velocity requirements. Any deviations must be approved by the "Authority Having Jurisdiction".
23		FSP-851R Notifier Addressable Smoke Detector, Photo Electric, Remote Test Capable	Mounts on DNR Duct Smoke Detector Housing

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Item	Page	Model Number & Description	Recommended Rough-In
24		DSTXXX System Sensor Sampling Tube, Metal	Must be sized by E.C. to completely span air duct. E.C. must specify correct length to Tech Electronics, Inc. BEFORE tubes will be ordered. See specification sheet included with this submittal for tube length.
25		RTS151 Notifier Remote Test Station w/ Switch, Alarm & Power LED's	One gang box 2-1/2" deep.
26		FRM-1 Notifier Addressable Relay Module	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
27		FDM-1 Notifier Addressable Dual Monitor Module to Monitor Flow and Tamper	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
28		FMM-1 Notifier Addressable Monitor Module to Monitor Hood	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
29		FRM-1 Notifier Addressable Relay Module	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
30		FRM-1 Notifier Addressable Relay Module for Elevator Control	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
31		FMM-1 Notifier Addressable Monitor Module for Shunt Trip	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
32		FRM-1 Notifier Addressable Relay Module (for cross-tie)	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.

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Item	Page	Model Number & Description	Recommended Rough-In
33		FMM-1 Notifier Addressable Monitor Module (for cross-tie)	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.
34		P2R-NOTI System Sensor Horn/Strobe, Wall Mount, Selectable Candela, Red Candela settings of 15, 15/75, 30, 75, 95, 110 & 115	4" Square box 1-1/2" deep. No frame is required. Surface mounts with BBS-2 skirt.
35		PC2R System Sensor Horn/Strobe, Ceiling Mount, Selectable Candela, Red Candela settings of 15, 15/75, 30, 75, 95, 110 & 115	4" Square box 1-1/2" deep. No frame is required. Surface mounts with BBSC-2 skirt.
36		SR System Sensor Strobe, Wall Mount, Selectable Candela, Red Candela settings of 15, 15/75, 30, 75, 95, 110, 115	4" Square box 1-1/2" deep. No frame is required. Surface mounts with BBS-2 skirt.
37		DHF-24120C GE INTERLOGIX Door Holder, Flush Wall Mount - 24 VAC/DC & 120VAC	4" square box 2-1/8" deep with one gang frame.
38		599 Edwards System Technology Door Holder Transformer - 24V 40VA	CHECK> Mounts adjacent to Fire Alarm Control Panel. 120VAC required.
39		AGC-2 Tech Electronics, Inc. Fuse, 2 Amp, 250V Fast Acting 1/4" x 1 1/4" Bussman	Installs in HRK.
40		HRK Tech Electronics, Inc. Holder, In Line, Fuse, Bussman	Back Box Included
41		FRM-1 Notifier Addressable Relay Module	4" square box 2 1/8" deep with extension ring. Overall minimum depth 3 5/8". No frame required.

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**Webster University
Interdisciplinary Science Building**

**Address: Accounts Payable Department
P.O. Box 191076
Webster Groves, MO 63119**

Tech Job Number: PJ1608310005

Contractor: GUARANTEE ELECTRICAL CO.

**WE ARE PLEASED TO SUBMIT THE ENCLOSED DRAWINGS
FOR APPROVAL. REQUIRED MATERIAL WILL BE
ORDERED ONLY AFTER RECEIPT OF ONE SET OF
APPROVED DRAWINGS AT TECH'S ST. LOUIS OFFICE.**

**ESTIMATED DELIVERY IS 12 WEEKS AFTER RECEIPT OF
APPROVED DRAWINGS.**

FOR INFORMATION REGARDING THIS PROJECT PLEASE CALL:

Keith Hinote

Project Manager

Direct Phone: (314) 951-1743

Fax: (314) 951-1243

Mobile Phone: (314) 791-4257

Keith.Hinote@techelectronics.com

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: January 5, 2017

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Joe Krussel

Project No. WT 14127.01

☐

UPS

☐

Courier

☒

Email

Copies	No.	Description
1 PDF	267100E02	(Submittal No.'s:) (R&B CxSRC)
		(Cannon #267100-004) - (Paric #15051-0400) - (WES #607)
		➤ Fire Alarm Product Data

Remarks:

c: **Kelvin Patel**
Kpatel@cannondesign.com

☒

Furnish as Submitted

☐

Furnish as Noted

☐

Rejected

☐

Revise & Resubmit

☐

Reviewed

☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

14127.01 - 267100 E02
JTK TO REVIEW
12/27/16

WTASHOP - Webster ISB - 26 7100-003 and 004

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, "WTASHOP (WTASHOP@wmtao.com)" <WTA...>
Date: 12/27/2016 11:31 AM
Subject: Webster ISB - 26 7100-003 and 004
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Attachments: 267100-003 Fire Alarm Shop Drawings.pdf; 267100-004 Fire Alarm Product Data.pdf

Attached for review.

Melissa Pirtle

CANNONDESIGN

1100 Clark Ave
St. Louis, Missouri 63102
T [314.425.8797](tel:314.425.8797)
cannondesign.com

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

PROJECT NAME	
ADDRESS	
NUMBER	
OWNER	
ARCHITECT / ENGINEER	
SUBMITTED BY	
CONTRACTOR / CM SUBMITTAL NO.	CANNON DESIGN SUBMITTAL NO.
DRAWING / DETAIL REFERENCE	SPECIFICATION SECTION / PARAGRAPH
MANUFACTURER / SUPPLIER	ITEM / PRODUCT ID
REQUIRED DATE	PRIORITY
CRITICAL	☐

To be completed by Reviewer

CANNON DESIGN SUBMITTAL NUMBER
RECEIVED DATE

- ☐ **A. No Exceptions Taken**
No further review of submittal is required.
- ☐ **B. Make Corrections Noted**
Incorporate corrections in work;
resubmission is not required.
- ☐ **C. Revise and Resubmit**
Revise as noted, and resubmit for review.
- ☐ **D. Rejected**
Submittal is not in compliance with Contract Documents;
provide new submittal.
- ☐ **E. For Record / Information Only**
Submittal was reviewed for Record / Information
purposes only.
- ☐ **F. Not Required for Review**
Submittal is not required by Contract Documents
and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

ITEM BEING SUBMITTED (check only one)

- ☐ Shop Drawings ☐ Certification / Qualifications ☐ Coordination Drawing
☐ Samples ☐ Record Documents ☐ Calculations
 (_____ copies) ☐ Product Data ☐ Schedules
☐ LEED Submittal ☐ O&M Manuals
☐ Other _____

ITEM BEING SUBMITTED FOR (check only one)

- ☐ Action ☐ Information Only ☐ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)



PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

Ry:

Devin D. Gates

REVIEWED BY	DATE

A/E COMMENTS

- ☐
- See attached sheet(s) for additional comments

REVIEWED BY	DATE



77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0400

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 12/20/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

Fax;
314-241-2203

RE: Fire Alarm Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

<i>Item</i>	<i>Package</i>	<i>Code</i>	<i>Rev.</i>	<i>Copies</i>	<i>Date</i>	<i>Description</i>	<i>Status</i>
Submittal		267100-004	1		12/20/2016	Fire Alarm Product Data	Submitted

NOTES:

CC:

Signed: _____
Devin Gates



The Power of Connection and Protection®

Design Installation Service

Tech Electronics is Your Source for CABLE on these Electronic Systems.

For information, Availability & Pricing of CABLE Please Call:

John Idoux

(314)951-1718

For All Other Information on This Project, Please Call:

Keith Hinote

(314) 951-1743

Tech Electronics, Inc.

6437 Manchester Ave., St. Louis, MO 63139 www.techelectronics.com

Offices & Representatives in Other Cities