

ADDENDUM TO THE BID DOCUMENTS		Page: 1	Total Pages: 57
<u>Addendum No:</u> # 2		<u>Date this Addendum Issued:</u> January 21, 2025	
<u>Issuing Office:</u> Matanuska-Susitna Borough School District (MSBSD) Purchasing Department 690 Cope Industrial Way Palmer, Alaska 99645 Phone: (907) 861-5120 Facsimile: (907) 861-5184		<u>Previous Addenda Issued:</u> None <u>1</u> <u>December 24, 2024</u> _____ _____ _____ _____	
<u>Return Acknowledgment To:</u> Issuing Department <u>Bid Title:</u> Repair Fire Doors <u>Bid No:</u> B25-08		<u>Date and Hour of Bid Due Date:</u> REVISED: February 14, 2025 at 2:00 P.M. January 31, 2025 at 2:00 P.M. January 6, 2025 at 2:00 P.M. <u>As Advertised (Frontiersman):</u> November 13 and 15, 2024 <u>As Advertised (ADN):</u> November 13 and 17, 2024	
<p>The following corrections, changes, additions, deletions, revisions, and/or clarifications are hereby made a part of the contract documents. In case of conflicts between this addendum and previously issued documents, this addendum shall take precedence. The bidder must acknowledge receipt of this addendum in the space provided on Appendix #1. Failure to do so may subject the bidder to disqualification.</p> <p>Clarifications The MSBSD will accept additional questions regarding this project until January 29, 2025 at 4:00 p.m.</p> <p>Attachments Clarifications (3 pages) Attachment A: REVISED Scope of Service (4 pages) Attachment C: REVISED Bid Form (1 page) Appendix 9: Glacier View School Pictures (10 pages) Appendix 10: Wasilla Middle School Pictures (4 pages) Appendix 11: School Location and Year Built (1 page) Appendix 12: Inspection Reports (18 pages) Appendix 13: IFC and NFPA 80 Reference Materials (15 pages)</p> <p style="text-align: center;">END OF ADDENDUM #2</p>			

APPROVED BY:	Signature on File	DATE:	January 21, 2025
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ADDENDUM #2

Information in this addendum takes precedence over original information. All other provisions of the document remain unchanged.

Note to Bidders: Bidders are required to acknowledge all addenda on Appendix 1.

The following additions, corrections and changes are hereby made to the above-referenced Invitation to Bid.

CLARIFICATIONS:

The MSBSD will accept additional questions regarding this project until January 29, 2025 at 4:00 p.m.

QUESTIONS AND ANSWERS:

GENERAL QUESTIONS:

1. Q: Is there an engineer's estimate or a general cost range available for the fire door repair bid solicitation?

A: No. The MSBSD expects contractors to submit the best price for this project.
2. Q: Are the original reports available?

A: The original reports are attached to this addendum as Appendix 12, Inspection Reports.
3. Q: Has the MSBSD communicated repairs with the Fire Marshall?

A: Yes, the Central Mat-Su Fire Marshal has reviewed this project. The responses included herein reflect the direction and opinion of the Central Mat-Su Fire Marshal, who has also provided an annotated excerpt of some of the applicable code governing this project. These annotated excerpts are provided in the attached Appendix 13, but their inclusion should not be construed to mean that these are the only applicable sections of code. Contractors are also advised that some schools included in this project may be subject to AHJs other than the Central Mat-Su Fire Department. We expect the requirements to be similar across AHJs.
4. Q: Are fusible links grandfathered in? If the doors are replaced, then current code is needed. If repairs are made what code/requirements does the AHJ want the contractor to follow?

A: Contractors must comply with the 2021 IFC, section 705 which covers existing construction. More specifically, section 705.2 covers conditions in which fusible links are allowed. Please also refer to the 2019 edition of NFPA 80, section 5.1.3, which covers replacement of fire doors and other like mechanisms and components.
5. Q: Does the MSBSD want the fire doors tied into the fire system?

A: The MSBSD is open to either option as long as the repair or replacement complies with NFPA 80, 2019 edition (and more specifically section 4.7, section 5.1.3, and chapters 10 and 11).
6. Q: If work is needed beyond doors repairs. How is it going to be handled? Who handles demo?



A: The contractor is responsible for all work that is necessary to repair or replace the fire doors. That may include demolition, cutting, and patching. All work must be coordinated with the MSBSD to ensure it doesn't interfere with normal school operation.

7. Q: Some doors are on the fire panel and some are fusible links. What option does the MSBSD want?

A: The MSBSD is open to either option as long as the repair or replacement complies with NFPA 80, 2019 edition (and more specifically section 4.7, section 5.1.3, and chapters 10 and 11).

8. Q: For bidding purpose in regard to door repair and replace, does the school district envision an RFP for the necessary demo and resulting rebuild to be performed, where needed? This would encompass lid and walls as well as counter tops.

A: The contractor is responsible for all work associated with this project. That includes demolition, rebuilding, and other construction-type work that may include alterations to walls and countertops.

9. Q: Per the RFP, the school district wants all doors to satisfy the AHJ, will the school district provide the AHJ's assessments of the various door systems in place and exactly what is the satisfactory standard for each.

A: The MSBSD will not provide an assessment of each door from the AHJ. The contractor is required to repair or replace the fire doors per the requirements in the 2021 IFC, section 705, and the NFPA 80, 2019 edition.

10. Q: Are electrical upgrades to be considered for this RFP

A: No, electrical upgrades shouldn't be need for this scope of work.

11. Q: On doors where the only option is to replace the door, does the school district want to tie the new door into the fire alarm and incorporate modern and current technology with automatic self-resetting units, which insures compliant and correct reset by simply opening the door?

A: Yes. If a fire door is replaced the MSBSD wants it tied into the fire alarm with current technology that automatically resets the unit. The install and testing must meet the requirements in the 2019 edition, NFPA 80, section 5.1.3, and all other standards required for new installations.

12. Q: The school district had an assessment of door conditions and drop out test performed, which this RFP appears to be largely based upon. Bidders request this report information in full, to gain a better understanding and knowledge of the existing known conditions.

A: The original reports are attached to this addendum as Appendix 12, Inspection Reports.

13. Q: Does the school district agree that all fuselink activated doors that are repairable, should be brought to current fuselink standards to ensure highest level of performance and safety from that type of system?

A: Repairable fusible links must be repaired in compliance with the appropriate standards in the 2021 IFC (including but not limited to section 705.2.5) and NFPA 80 2019 (including but not limited to sections 4.7 and 5.2.3.8).



14. Q: In regard to doors in need of replace, will the school district desire Seismic Validation, non-Alaska or Alaska Stamp?

A: If a door is replaced, the MSBSD requires a stamp from a licensed design professional recognized in the State of Alaska.

15. Q: As there is cost associated, in the case of assemblies that the school district feels they would rather repair than replace, and the wide range of school build dates along with the evolution of code, is the school district agreeable to provide dates and relevant codes that were in effect at the time the facility was built, so those codes may be evaluated in order to correctly bid the repair and bring the door back into compliance.

A: The MSBSD has provided a list of approximate construction dates in the attached Appendix 11, School Location and Year Built. If additional information is desired, bidders should submit a list of schools and the specific information needed so that the MSBSD may pursue a public records request with the appropriate AHJ. Please remember if a door is being replaced then new installation standards listed in section 5.1.3 of NFPA 80 2019 edition must be followed.



ATTACHMENT A: **REVISED SCOPE OF SERVICES**

1. GENERAL REQUIREMENTS

The Matanuska Susitna Borough School District (MSBSD) is seeking bids from qualified contractors to repair or upgrade fire doors throughout the MSBSD. When applicable, upgrades will include repairing drop-down fire doors and associated fire systems on these doors.

2. GENERAL INFORMATION

- A. All work will be completed in a workmanlike manner according to standard practices. The contractor is responsible for removal of debris and jobsite cleanup.
- B. Any alteration or deviation from written specifications involving extra costs shall only be executed upon a written change order signed by both the contractor and the MSBSD. Each written notice of changed conditions shall be clearly identified as such and shall include an estimate of the cost and the contract time impact of the alleged changed condition.
- C. **Substantial completion of the work shall be by January 2, 2026 and total completion by July 31, 2026.**
- D. The work schedule must be coordinated with the MSBSD Facilities Department before work begins. The contractor will be allowed to work on the doors during school hours. Drop Tests and heavy construction must be completed outside school hours, or during summer or winter breaks.
- E. All work will be completed in a workman like manner according to **NFPA 80** standards and other applicable code.
- F. Please coordinate with the AHJ (Authority Having Jurisdiction) on any fire system connections or additions performed under the scope of work below.
- G. Contractor must provide minimum of a one (1) year warranty on work.

3. SCOPE

Below are a list of schools and the known deficiencies. The contractor must repair the deficiencies below and any other deficiency discovered during the repair and testing process.

- A. Big Lake Elementary School
There is one (1) fire door in the Kitchen. The manufacturer is Cookson and the door size is 8'5" x 4'.
 - 1. Ensure the fire door passes a drop door test
 - 2. Repair or replace fusible link
 - 3. **Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 - 4. Install governor or speed regulator
- B. Butte Elementary School
There is one (1) fire door in the Kitchen. The manufacturer is Cookson and the door size is 8'5" x 3'7-1/2".
 - 1. Ensure the fire door passes a drop door test
 - 2. Replace the manufacturer number on the door tag
 - 3. Repair or replace fusible link



4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703

5. Repair or replace the auto release mechanism

C. Cottonwood Creek Elementary School

There is one (1) fire door in the Kitchen. The manufacturer is Cookson and the door size is 8' 5" x 4' 1/2".

1. Ensure the fire door passes a drop door test
2. Ensure the fire doors can pass a visual inspection
3. Repair or replace fusible link

4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703

D. Glacier View School

There is one (1) fire door in the Kitchen. The manufacturer is Cookson and the door size is 7'1" x 4'2".

1. Ensure the fire door passes a drop door test
2. Repair drop arm wire
3. Repair or replace fusible link
4. Tie to auto release device
5. Repair or replace linkages
6. Install chain
7. Replace gate handle so it complies with NFPA code
8. Install governor or speed regulator

E. Goose Bay Elementary School

There is one (1) fire door in the Kitchen. The manufacturer is Cookson and the door size is 8' 1" x 3' 10".

1. Ensure the fire door passes a drop door test
2. Ensure the fire doors can pass a visual inspection
3. Repair or replace fusible link

F. Larson Elementary School

There is one (1) fire door in the Kitchen. The manufacturer is Wayne Dalton and the door size is 8' 1" x 4' 2".

1. Ensure the fire door passes a drop door test

G. Meadow Lakes Elementary School

There is one (1) fire door in the Kitchen. The manufacturer is Wayne Dalton and the door size is 8' x 4'1".

1. Ensure the fire door passes a drop door test
2. Replace stop block
3. Run successful drop test with fire alarm

H. Palmer High School

There are two (2) fire doors. One is in Concessions and the other one is located in the Kitchen. The manufacturers are Kinnear and Cornell the door sizes are 9' 6" x 3' 11" and 10' 10" x 7' 2".

1. Ensure the fire door passes a drop door test
2. Repair or replace linkages
3. Repair or replace drop arm
4. Run successful drop test with fire alarm



- I. Palmer Junior Middle School
There are four (4) fire doors in the Kitchen. The manufacturer is Cornell and the door size for all four doors is 3' 4" x 4' 2".
1. Ensure the fire door passes a drop door test
 2. Ensure the fire doors can pass a visual inspection
 3. Repair or replace fusible link
 - 4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 5. Run successful drop test with fire alarm
- J. Sherrod Elementary School
There is one (1) fire door. The manufacturer is Wayne Calton and the size is 8' x 4'4-1/4"
1. Ensure the fire door passes a drop door test
- K. Snowshoe Elementary School
There is one (1) fire door located in the Kitchen. The manufacturer is Cookson and the door size is 8'4" x 4'.
1. Ensure the door passes a drop door test
 2. Repair or replace fusible link
 3. Install governor or speed regulator
 - 4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 5. Repair or replace the auto release mechanism
- L. Sutton Elementary School
There is one (1) fire door in the Kitchen. The manufacturer is Atlas and the door size is 5'4" x 4'.
1. Ensure the fire door passes a drop door test
 2. Repair or replace fusible link
 3. **Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 4. Repair or replace the auto release mechanism
- M. Teeland Middle School
There are nine (9) fire doors. They are in the Cafeteria/Kitchen area. The manufacturer is Wayne Dalton and the sizes are 9' 5" x 7' 3 1/2", 6' 9" x 7' 3 1/2", and 8' 1" x 7' 1/2".
1. Ensure the fire door passes a drop door test
 2. Repair or replace fusible link
 - 3. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 4. Repair or replace the auto release mechanism
 5. Replace broken glides
 6. Replace broken operator chain
 7. Run successful drop test with fire alarm
- N. Trapper Creek Elementary School
There are two (2) fire doors in the Kitchen. The manufacturer is Cookson and the door sizes are 6' 9" x 7' 4" and 24' 1/2" x 51".
1. Ensure the fire door passes a drop door test
 2. Ensure the fire doors can pass a visual inspection
 3. Repair or replace fusible link
 - 4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**



- O. **Wasilla High School**
There are six (6) fire doors. Two (2) are in the Warrior Grill and four (4) are located in the Kitchen. One (1) is manufactured by Kinnear and five (5) are manufactured by Cookson. The sizes are 9' 4" x 4' 10", 9' 4" x 5' 4", and 6' 4-1/2" x 4' 2".
1. Ensure the fire door passes a drop door test
 2. Repair or replace the manual release mechanism
 3. Repair or replace fusible link
 - 4. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 5. Run successful drop test with fire alarm
- P. **Wasilla Middle School**
There are two (2) fire doors in the Kitchen. The manufacturer is Cookson and the door sizes are 21' 1/2" x 8' 1".
1. Ensure the fire door passes a drop door test
 - 2. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**
 3. Replace the fire tag per NFPA code
 4. Repair or replace fusible link
 5. Run successful drop test with fire alarm
- Q. **Willow Elementary School**
There is one (1) fire door in the Kitchen. The manufacturer is Kinnear/Peelle and the door size is 3'3" x 2'11-1/2".
1. Ensure the fire door passes a drop door test
 2. Repair or replace fusible link
 - 3. Ensure wall penetrations comply with NFPA code and 2021 IFC, Section 703**

4. **CONTRACT AWARD**

Contractors may bid on any school or combination of schools. The MSBSD will recommend award of a contract to the lowest responsive and responsible bidder for each school. Contracts may be awarded to more than one contractor and not all schools may be awarded at this time. The MSBSD reserves the right to award each school independently.

5. **CONTRACT TERM**

The term of any contract resulting from this solicitation shall run from Notice of Award through July 31, 2026. Substantial completion is January 2, 2026 and final completion is July 31, 2026.

6. **CONTRACT MANAGEMENT**

At the commencement of any resulting contract, the MSBSD and the successful bidder shall each designate a contract administrator. Such persons shall be the respective party's single point of contact for purposes of management of the contract. The bidder's contract administrator shall assume responsibility for the coordination of all contract issues under the contract.



ATTACHMENT C:
REVISED BID FORM

The undersigned hereby further proposes to furnish all services, including labor, equipment, supplies, and supervision necessary to repair fire doors throughout the MSBSD in full accordance with the Bidding Documents.

BASE BID		
Item No.	Location	Unit Price
1	Big Lake Elementary School	\$
2	Butte Elementary School	\$
3	Cottonwood Creek Elementary School	\$
4	Glacier View School	\$
5	Goose Bay Elementary School	\$
6	Larson Elementary School	\$
7	Meadow Lakes Elementary School	\$
8	Palmer High School	\$
9	Palmer Junior Middle School	\$
10	Sherrod Elementary School	\$
11	Snowshoe Elementary School	\$
12	Sutton Elementary School	\$
13	Teeland Middle School	\$
14	Trapper Creek Elementary School	\$
15	Wasilla High School	\$
16	Wasilla Middle School	\$
17	Willow Elementary School	\$

Company: _____
Printed Name

Date

Contractor: _____
Signature



APPENDIX 9:
GLACIER VIEW SCHOOL PICTURES





















APPENDIX 10:
WASILLA MIDDLE SCHOOL PICTURES









APPENDIX 11:
SCHOOL LOCATION AND YEAR BUILT

School Name	Year Built
Big Lake Elementary School	1964
Big Lake Elementary School, Addition 1	1979
Big Lake Elementary School, Addition 2	1984
Butte Elementary School	1978
Cottonwood Creek Elementary School	1983
Glacier View School	1995
Goose Bay Elementary School	1992
Larson Elementary School	2002
Meadow Lakes Elementary School	2002
Palmer High School	1976
Palmer High School, Addition 1	1982
Palmer High School, Addition 2	1987
Palmer Junior Middle School	1953
Palmer Junior Middle School, Addition 1	1964
Palmer Junior Middle School, Addition 2	1970
Palmer Junior Middle School, Addition 3	1973
Palmer Junior Middle School, Addition 4	1983
Palmer Junior Middle School, Addition 5	1986
Palmer Junior Middle School, Addition 6	1995
Sherrod Elementary School	2003
Snowshoe Elementary School	1979
Sutton Elementary School	1988
Teeland Middle School	2001
Trapper Creek Elementary School	1982
Wasilla High School	1976
Wasilla High School, Addition 1	1980
Wasilla Middle School	1962
Wasilla Middle School, Addition 1	1969
Wasilla Middle School, Addition 2	1980
Wasilla Middle School, Addition 3	1995
Willow Elementary School	1988





**Fire Door
 Inspection and Test Form**

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under **extreme spring tension** can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY BIG LAKE ELEMENTARY DATE 18 JULY 2013
 ADDRESS 3808 S BIG LAKE RD CONTACT DAN BELANGER
BIG LAKE, AK 99652 JOB NO 75408

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horizontal sliding, vertical sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8' 5" x 4' 0"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	COORSAN			
MFR. SERIAL NO.	Not Available			
FIRE DOOR LABEL NO.	96932			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	A, F, G			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK NO DROP TEST PERFORMED. FUSIBLE LINK 3" BELOW DROP CEILING. NO LUBRICATION
ON FUSIBLE LINK AT CEILING. NO THERMAL WALL PENETRATION. NO GOVERNOR / SPEED
REGULATION. ADJUSTED SPRING TENSION AS DOOR WAS IN DROP MODE AT ARRIVAL.
DOOR NOW STAYS AT OPEN POSITION AND DOES NOT DRIFT.

TESTED BY DEREK ESPINOSA WITNESSED BY Jared Sewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 CONSUMER LANE SIGNATURE Jared Sewell
Palmer, AK 99645

SIGNATURE [Signature] DATE 18 July 2013 BY [Signature]
 REPAIR FIRE DOORS BID #B25-08



**Fire Door
 Inspection and Test Form**

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY BUTTE ELEMENTARY DATE 17 July 2023
 ADDRESS 4006 BUTTE BL CONTACT DAN BELANGEIL
Palmer, AK 99645 JOB NO 25831

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, non-rolling, vert. sliding, accord on, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8' 5" x 3' 7 1/2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Cookson			
MFR. SERIAL NO.	NOT AVAILABLE			
FIRE DOOR LABEL NO.	114594			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	A.F.G.			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No manufacturer Number on Tag, No Fusible Link at Ceiling, No Through Wall Penetration, No Auto Release Mechanism, No Drop Test Performed.

TESTED BY DEREK ESPINOZA WITNESSED BY David Jewell
 (Print name of person conducting inspection and test)
 COMPANY DOOR TECH LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 GERSHMER LOOP SIGNATURE David Jewell
Palmer, AK 99645
 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 17 July 2023 BY [Signature]
 REPAIR FIRE DOORS BID #B25-08

LAWRENCE

DOORS

Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.



WARNING! – A fire door could close rapidly at any time and cause death or serious injury.



WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY COTTONWOOD CREEK ELEMENTARY

DATE 16 JUNE 2023

ADDRESS 810 N SEWARD MERIDIAN PKWY
WASILLA, AK 99654

CONTACT DAN BELANGER

JOB NO. 25832

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire			
DOOR SIZE (width x height)	8'5" x 4'1/2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Cork Steel			
MFR. SERIAL NO.				
FIRE DOOR LABEL NO.	180635			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, G, N, P			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK MISSING S-HOOK + FUSIBLE LINK AT Door Arm. NO THROUGH WALL PENETRATION, NO
Auto RELEASE MECH., SPRINGS WOUND TOO HOT, Door FOUND IN DROP MODE, Door STAYS AT HANGER
WHEN OPEN AND RELEASE MECH IN DROP MODE, NO SEPARATE LABELS (MANUFACTURER/FIRE LABEL CONTROL,
NO CLOSING DEVICE, Door NOT SEALING TIGHT TO COUNTER

TESTED BY DEREK ESPINOZA
(Print name of person conducting inspection and test)

WITNESSED BY Kyle Lewis

COMPANY Door TECH LLC

REPRESENTING Door Tech LLC

ADDRESS 5768 GERMMA Loop
Palmer, AK 99645

SIGNATURE [Signature]

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 16 June 23 BY [Signature]



**Fire Door
 Inspection and Test Form**

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY CALACIER VIEW SCHOOL DATE 21 July 2023
 ADDRESS 65975 S WOLVERINE CIRCLE CONTACT Dan BELANGER
SUTTON, AK 99674 JOB NO 25855

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horizontal sliding, vertical sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	7'1" x 4'2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	CORLISSON			
MFR. SERIAL NO.	N/A			
FIRE DOOR LABEL NO.	128291			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, G, H, N, P, S			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK NO DROP TEST PERFORMED. DROP ARM WIRE SHOT WITH TIE WIRE. BROKEN FUSIBLE LINK. NOT TIED TO AUTO RELEASE DEVICES AT DROP ARM. NO LINKAGES, NO CHAIN. BOTTOM BAR FOR GASK HANDLE INSTALLED. PLETHORIC SWEETS GASK INSIDER TO VERTICAL RAILS. DOOR IS WOUND HOT. NO SPEED REGULATOR / GOVERNOR DEVICE.

TESTED BY DEREK ESPINOZA WITNESSED BY Jared Jewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 GARDENIA LANE SIGNATURE Jared Jewell
Palmer, AK 99645

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 21 July 2023 BY [Signature] BID #B25-08

APPENDIX 12: INSPECTION REPORTS



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

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- The second drop test is to verify that the automatic-closing device has been reset correctly.

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! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY GOOSE BAY ELEMENTARY DATE 18 July 2023
 ADDRESS 6400 HOLLYWOOD BLVD CONTACT DAN BELANGER
WASILLA, AK 99654 JOB NO 25840

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8'1" x 3'10"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	COXSON			
MFR. SERIAL NO.	NOT AVAILABLE			
FIRE DOOR LABEL NO.	514777			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, H, S			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK NO FUSIBLE LINKS WITHIN 4'-12" OF CEILING ON EITHER SIDE OF CURTAIN, HAS CARPET GLUED TO BOTTOM OF DOOR, NO DROP TEST PERFORMED.

TESTED BY DANIEL ESPINOZA
(Print name of person conducting inspection and test)
 COMPANY DOOR TECH, LLC
 ADDRESS 5768 GELSHAMER LOOP
WASILLA, AK 99645

WITNESSED BY Jared Jewell
 REPRESENTING Door Tech LLC
 SIGNATURE Jared Jewell

REPAIR FIRE DOORS

RECOMMENDED WORK IS: AUTHORIZED ☐ BDC#1825-08

SIGNATURE [Signature] DATE 18 July 2023 BY 690 Cope Industrial Way || Palmer, Alaska 99645 || P. 29



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under **extreme spring tension** can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY LARSON ELEMENTARY DATE 13 July 2023
ADDRESS 2722 E Selkirk Rd CONTACT Don Belanger
Wasilla, AK 99654 JOB NO. 25501

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, non-rolling, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8'1" x 4'2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	WAYNE Dayton			
MFR. SERIAL NO.	15240A-2			
FIRE DOOR LABEL NO.	782022			
VISUAL INSPECTION	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	W			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK Door Failed to Fully Close on Drop Tests. Removed T-BRUSH SEALS
IN ATTEMPT TO FREE ROLLER, BUT DOOR STILL FAILED TO FULLY CLOSE. REINSTALLED
T-BRUSH SEALS. RETURNED DOOR TO SERVICE.

TESTED BY Debra Espinosa WITNESSED BY Jared Jewell
(Print name of person conducting inspection and test)
COMPANY Door Tech LLC REPRESENTING Door Tech LLC
ADDRESS 5768 GEISHAMER LANE SIGNATURE Jared Jewell
Palmer, AK 99645

SIGNATURE [Signature] DATE 13 July 23 BY [Signature]
REPAIR FIRE DOORS



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.



WARNING! – A fire door could close rapidly at any time and cause death or serious injury.



WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY MEADOW LAKES ELEMENTARY DATE 7/14/2013
ADDRESS 1741 Pittman Rd CONTACT Dan Beuenger
Wasilla, AK 99654 JOB NO. 25502

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8'0" x 4'1"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	WING Dalton			
MFR. SERIAL NO.	1214603-2			
FIRE DOOR LABEL NO.	724755			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	1 SEC / 49 IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	O, U			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK Door Closed Too Fast When Released. Winding Wheel Air Too Short
Missing Stop Block When Drop Tension Released. @ Near Lower Pin
In Winding Wheel.

TESTED BY DEREK ESPINOSA
(Print name of person conducting inspection and test)
COMPANY Door Tech LLC
ADDRESS 5768 GERSHMAN LOOP
Palmer, AK 99645

WITNESSED BY Jared Jewell
REPRESENTING Door Tech LLC
SIGNATURE Jared Jewell

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 14 July 2013 BY _____



**Fire Door
 Inspection and Test Form**

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

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Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY Palmer High School DATE 17 July 2013
 ADDRESS 1170 W. BEAULIE RD CONTACT DAN BELANGER
Palmer, AK JOB NO 29263 DHS

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	CONCESSIONS	KITCHEN		
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accord. on fire curtain, etc.)	PULLING FIRE DOOR	ROLLING FIRE DOOR		
DOOR SIZE (width x height)	9'6" x 3'11"	10'10" x 7'2"	' " x ' "	' " x ' "
DOOR MFR.	KINNEPAT	CORNELL		
MFR. SERIAL NO.	33453	NOT AVAILABLE		
FIRE DOOR LABEL NO.	30648 AL	214287		
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F.N.O.S	A.F.N.O.S		
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK (A) MISSING BAR PINNING ADJUSTING WHEEL, ALL LINKAGES DISCONNECTED, NO RELEASE MECHANISM CONNECTED TO COOKSON FIREFLEX 2 RELEASE DEVICE. NO DROP TEST PERFORMED.
(B) DROP ARM IS STAINED CLOSED TO BOLT ON HEADPLATE, ALL LINKAGES DISCONNECTED, NO RELEASE MECHANISM/LINKAGE, CONNECTED TO COOKSON FIREFLEX 2. NO DROP TEST PERFORMED

TESTED BY DEREK ESPINOZA WITNESSED BY Jared Jewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech, LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 GERSHWIN LANE SIGNATURE Jared Jewell
Palmer, AK 99645 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 17 July 2013 BY [Signature] BID #B25-08
 REPAIR FIRE DOORS



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

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FACILITY Palmer Jr. Middle School DATE 17 July 2023
 ADDRESS 1159 S. CHUGACH CONTACT Dan Belanger
Palmer, AK 99645 JOB NO 25406

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	Washroom - Kitchen	KITCHEN	KITCHEN	KITCHEN
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Curtain Fire	Rolling Fire Door	Rolling Fire Door	Rolling Fire Door
DOOR SIZE (width x height)	3'4" x 4'2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Cornell	Cornell	Cornell	Cornell
MFR. SERIAL NO.	Not Available	Not Available	Not Available	Not Available
FIRE DOOR LABEL NO.	179623	179626	Not Available	Not Available
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec.)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec.)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	A, F, G, H	A, F, G, H	A, F, G, H	A, F, G, H
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No Drop Tests Performed. All Failed Visual Inspection.

TESTED BY CERIL Espinoza WITNESSED BY Jared Jewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 Gensuana Lane SIGNATURE Jared Jewell
Palmer AK 99645 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 17 July 2023 BY [Signature] BID #B25-08



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

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FACILITY Shelrod Elementary DATE 6/9/2023
 ADDRESS 561 N Gulkana St CONTACT _____
Palmer AK 99645 JOB NO 25845

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	Kitchen			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling			
DOOR SIZE (width x height)	8' 0" x 4' 1 1/4"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Wayne Dalton			
MFR. SERIAL NO.	2830660-3			
FIRE DOOR LABEL NO.	847211			
VISUAL INSPECTION	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	None			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK Adjusted Spring tension upon 1st drop had to many turns. Re Set to 3 initial turns door passed 2 drops after reset.

Notes: 2 more Fire doors @ entrance / admin area

TESTED BY Ian Comer WITNESSED BY DEREK ESPINOSA
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 Gershwin Loop SIGNATURE _____
Palmer AK 99645

SIGNATURE _____ DATE 6/7/2023 BY _____
 REPAIR FIRE DOORS
 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐ BID #B25-08



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under **extreme spring tension** can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY SNOWSUE ELEMENTARY DATE 14 July 2023
ADDRESS 2001 W Fairview Loop CONTACT Dan Belanger
Wasilla, AK 99654 JOB NO 25846

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	8'4" x 4'0"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Corrison			
MFR. SERIAL NO.	102049			
FIRE DOOR LABEL NO.	102049			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	11/SEC / 32 IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, G, H, S			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No GOVERNOR / SPEED REGULATION on Door, No THROUGH WALL PENETRATION,
No AUTO RELEASE MECHANISM, NON DEM GATE LOCKS INSTALLED on Bottom Bar,
Failed Drop Test

TESTED BY Dan Espinoza
(Print name of person conducting inspection and test)
COMPANY Door Tech LLC
ADDRESS 5719 GERSHWIN Loop
Palmer AK 99645

WITNESSED BY Jared Jewell
REPRESENTING Door Tech LLC
SIGNATURE [Signature]

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 14 July 2023 BY _____
REPAIR FIRE DOORS BID #B25-08



**Fire Door
 Inspection and Test Form**

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY SUTTON ELEMENTARY DATE 21 July 2013
 ADDRESS 11672 N WILGUT WAY CONTACT DAN BELONGER
SUTTON, AK 99674 JOB NO. 25047

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Fire Door			
DOOR SIZE (width x height)	5'4" x 4'0"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Atlas			
MFR. SERIAL NO.	061718			
FIRE DOOR LABEL NO.	246821			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, G, H, S			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No Drop Test Performed. Incomplete Fusible Link Placements. No
Trough Wall Penetration & Linkages. No Auto Release Devices. Gate Locks
Attached To Bottom Bar.

TESTED BY Derek Espinoza WITNESSED BY Jared Jewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5768 GERSHMAN LANE SIGNATURE Jared Jewell
Palmer, AK 99645 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 21 July 2013 BY [Signature] BID #B25-08
 P/N 12-0013



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under **extreme spring tension** can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY TEELAND MIDDLE SCHOOL DATE 13 July 2023
ADDRESS 2788 N SEWARD MERIDIAN PKWY CONTACT DAN BELANGER
WASILLA, AK 99654 JOB NO. 25407

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	CAFETERIA / KITCHEN	CAFETERIA / KITCHEN	CAFETERIA / KITCHEN	CAFETERIA / TABLE RM
DOOR TYPE (rolling, non-rolling, vert sliding, accordian, fire curtain, etc.)	Rolling Fire Door	Rolling Fire Door	Rolling Fire Door	Rolling Fire Door
DOOR SIZE (width x height)	9' 5" x 7' 3 1/2"	6' 9" x 7' 3 1/2"	9' 5" x 7' 3 1/2"	8' 1" x 7' 3 1/2"
DOOR MFR.	WAYNE DALTON	WAYNE DALTON	WAYNE DALTON	WAYNE DALTON
MFR. SERIAL NO.	1696371-3	1696371-4	1696371-3	1696371-06
FIRE DOOR LABEL NO.	783053	783054	783052	783056
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds; height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds; height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)				
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK NEED A KEY TO SET FIRE SWITCH TO TEST MODE.

TESTED BY DENISE ESPINOSA
(Print name of person conducting inspection and test)

COMPANY Door Tech LLC

ADDRESS 5768 GERSUMER LANE

Palmer, AK 99645

SIGNATURE [Signature] DATE 13 July 2023 BY [Signature]

REPAIR FIRE DOORS

© 2015 Lawrence Roll-Up Doors, Inc.

WITNESSED BY Lared Jewell

REPRESENTING Door Tech LLC

SIGNATURE [Signature]

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

BID #B25-08

White – for Manufacturer (after initial installation) • Yellow – for Testing Company • Pink – for Customer

Rev. 12/15

Mat-Su Borough School District || Purchasing Department || 690 Cope Industrial Way || Palmer, Alaska 99645 || P. 37

LAWRENCE

ROLL-UP DOORS, INC.

Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Model Codes, fire doors must be inspected and tested at least annually. A written record must be kept by the owner and made available to the Authority Having Jurisdiction. Repairs must be made and defects that could interfere with operation corrected without delay. Repair parts must be obtained from the original manufacturer, with the exception of labeled retrofit operators. The door must be tested after repairs are completed.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door may close rapidly at any time and cause DEATH or SERIOUS INJURY.

! WARNING! – Components under extreme spring tension can cause DEATH or SERIOUS INJURY. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of this type of fire door. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines are on the reverse side.

PROJECT TRAPPED CREEK ELEMENTARY DATE 20 July 2023
 ADDRESS 6742 E PETERSVILLE RD CONTACT DAN BELANGER
TRAPPED CREEK, AK 99683 JOB NO 25851

DOOR LOCATION	KITCHEN	KITCHEN		
DOOR TYPE (vert. rolling, horiz. sliding, etc.)	Rolling Fire Door	Rolling Fire Door		
DOOR SIZE (W x H)	6'9" x 7'4"	24'12" x 51"	x	x
DOOR MFR.	COOKSON	COOKSON		
MFR. SERIAL NO.	N/A	N/A		
FIRE DOOR LABEL NO.	N/A	N/A		
VISUAL INSPECTION	PASS <u>(FAIL*)</u>	PASS <u>(FAIL*)</u>	PASS FAIL*	PASS FAIL*
OPERATIONAL CHECK	PASS <u>(FAIL)</u>	PASS <u>(FAIL)</u>	PASS FAIL	PASS FAIL
FIRST DROP TEST	PASS FAIL*	PASS FAIL*	PASS FAIL*	PASS FAIL*
SECOND DROP TEST	PASS FAIL*	PASS FAIL*	PASS FAIL*	PASS FAIL*
* FAIL CODE (from reverse side, if applicable)	E, M, N	E, M, N		
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No Door Tests Performed. Both Doors Fail Visual & Operational Inspect.
Fusible Links Are Incorrect Spacing, No Through Hole Penetration. Small Door
Won't Close Last 2". Large Door Obstructed By Vending Machine.

TESTED BY DEREK ESPINOZA WITNESSED BY Jared Jewell
 (Print name of person conducting inspection and test)
 COMPANY Door Tech LLC REPRESENTING DoorTech LLC
 ADDRESS 5768 GERSHMAN LANE SIGNATURE Jared Jewell
PALMER, AK 99645
 RECOMMENDED WORK IS: ☒ AUTHORIZED ☐ DECLINED

SIGNATURE [Signature] DATE 20 July 2023 BY _____

LAWRENCE

DOORS

Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY Wasilla High School DATE 10 July 2023
ADDRESS 701 E. Bucara Rd CONTACT Dan Belanger
Wasilla, AK 99654 JOB NO 29263 WHS

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	Wardrobe Grill	Wardrobe Grill	KITCHEN-R1	KITCHEN-R2
DOOR TYPE (rolling horiz sliding, vert sliding, accordion fire curtain, etc.)	COUNTER FIRE SHUTTER	COUNTER FIRE SHUTTER	COUNTER FIRE SHUTTER	COUNTER FIRE SHUTTER
DOOR SIZE (width x height)	9' 4" x 4' 10"	9' 4" x 5' 4"	6' 4 1/2" x 4' 2"	6' 4 1/2" x 4' 2"
DOOR MFR.	WINNEAR	COOLSON	COOLSON	COOLSON
MFR. SERIAL NO.	30644 AL	Not Available	AA481311	AA481311
FIRE DOOR LABEL NO.	33457	114917	WH1-019910	WH1-019911
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if applicable)	F, G, M, P, B	F, G, O		
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK (A) - CURTAIN NOT SITTING LEVEL, NO FUSIBLE LINK AT CEILING, NO THROUGH WALL PENETRATION, HOLE CUT INTO RIGHT FACE OF HOOD, NO FUSIBLE LINK AT RIGHT RELEASE MECHANISM.
(B) - Door Won't Open, NO FUSIBLE LINK AT CEILING, NO THROUGH WALL PENETRATION LINKAGE, UNABLE TO OPERATE DOOR MANUALLY. NO DROP TEST PERFORMED ON EITHER DOOR.

TESTED BY Derek Espinoza
(Print name of person conducting inspection and test)
COMPANY Door Tech LLC
ADDRESS 5768 Geosumer Lane
Palmer, AK 99645

WITNESSED BY Jared Jewett
REPRESENTING DoorTech LLC
SIGNATURE [Signature]

RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 10 July 2023 BY _____

BID #B25-08



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually.

A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.



WARNING! – A fire door could close rapidly at any time and cause death or serious injury.



WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY WASILLA HIGH SCHOOL DATE 10 July 2023
ADDRESS 701 E BURGARD RD CONTACT DAN BELANGER
WASILLA, AK 99654 JOB NO 29263 WHS

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	REAR DOOR	KITCHEN - R4	KITCHEN - R3	
DOOR TYPE (rolling, non-rolling, sliding, vent, sliding, accordion, fire curtain, etc.)	Rolling Fire Door	Rolling Fire Door	Rolling Fire Door	
DOOR SIZE (width x height)	' " x ' "	6' 4 1/2" x 4' 2"	6' 4 1/2" x 4' 2"	' " x ' "
DOOR MFR.		COOLSON	COOLSON	
MFR. SERIAL NO.		AA481311	AA481311	
FIRE DOOR LABEL NO.		WH1-019913	WH1-019912	
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds - height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds - height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if appl cable)				
INSPECTION LABEL NO. (if appl cable)				

RECOMMENDED WORK UNABLE TO PERFORM DROP TEST ON (4) KITCHEN DOORS. NO MANUAL RELEASE MECHANISMS, NO LINKAGES. DOOR WIRED TO DOOR WITH COOLSON FDO-A10 FIRE DOOR OPERATOR. DOORS R1, R2, R3, R4 NEED DROP TESTED WITH FIRE ALARM SYSTEM

TESTED BY DEREK ESPINOZA WITNESSED BY John Jensen
(Print name of person conducting inspection and test)
COMPANY DOOR TECH, LLC REPRESENTING Door Tech, LLC
ADDRESS 5768 GARDNER LOOP SIGNATURE [Signature]
Palmer, AK 99645 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 10 July 2023 BY [Signature] BID #B25-08
REPAIR FIRE DOORS



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

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- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY Wasilla Middle School DATE 13 July 2013
ADDRESS 650 Bagdad Rd CONTACT Don Belanger
Wasilla, AK 99654 JOB NO 25405

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN - LH			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	Rolling Cookson Fire			
DOOR SIZE (width x height)	21' 1/2" x 8' 1"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	Cookson			
MFR. SERIAL NO.	115405			
FIRE DOOR LABEL NO.				
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds; height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds; height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side, if appl. cable)	A, F, G, P			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK UNABLE TO ACCESS WINDING WHEEL, ~~REPAIR~~ THROUGH WALL PENETRATION.
MISSING BOLT ON Door OUT ARM, NO FIRE TAG, NO O.S. FIRE DOOR. NO
DROP TEST PERFORMED. EXPOSED FUSIBLE LINK HAS PRINT ON IT.

TESTED BY DEREK ESPINOSA WITNESSED BY Jared Jewell
(Print name of person conducting inspection and test)
COMPANY Door Tech LLC REPRESENTING DoorTech LLC
ADDRESS 5768 Gensamer Lane SIGNATURE Jared Jewell
Palmer, AK RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 13 July 2013 BY [Signature] BID #B25-08



Fire Door Inspection and Test Form

Per the requirements of NFPA-80 and Building Codes, fire doors must be inspected and tested at least annually. A written record must be kept and made available to the Authority Having Jurisdiction. Repairs must be made, and defects that could interfere with operation must be corrected, without delay. Repair parts must be obtained from the original door manufacturer, with the exception of labeled retrofit operators. Doors must be tested after repairs are completed. Doors that cannot be repaired or retrofitted must be replaced.

Rolling fire doors must be tested twice:

- The first drop test is to check for proper operation and full closure.
- The second drop test is to verify that the automatic-closing device has been reset correctly.

! WARNING! – A fire door could close rapidly at any time and cause death or serious injury.

! WARNING! – Components under extreme spring tension can cause death or serious injury. Adjustments and repairs must be made by a trained door systems technician using proper tools and instructions.

Inspection, testing, repairs and maintenance must be performed by a trained door systems technician with a complete knowledge and understanding of the type of door being tested. Resetting of the automatic-closing device must be done in accordance with the manufacturer's instructions. Before testing, a visual inspection must be performed to identify damaged or missing parts that may cause a hazard. Inspection must also include an operational check. Guidelines for inspection and testing are provided on the reverse side.

FACILITY Willow Elementary DATE 20 July 2017
 ADDRESS 31706 W Parks Hwy CONTACT Dan Belanger
Willow, AK 99688 JOB NO 25852

REFERENCE DOOR MARK	A	B	C	D
DOOR LOCATION	KITCHEN			
DOOR TYPE (rolling, horiz. sliding, vert. sliding, accordion, fire curtain, etc.)	ROLLING FIRE SHUTTER			
DOOR SIZE (width x height)	3'3" x 2'11 1/2"	' " x ' "	' " x ' "	' " x ' "
DOOR MFR.	LINNEAR/PRELU			
MFR. SERIAL NO.	N/A			
FIRE DOOR LABEL NO.	3670			
VISUAL INSPECTION	PASS <input type="checkbox"/> FAIL* <input checked="" type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
OPERATIONAL CHECK	PASS <input checked="" type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
FIRST DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
SECOND DROP TEST	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>	PASS <input type="checkbox"/> FAIL* <input type="checkbox"/>
CLOSING TIME (total seconds / height or width in inches divided by sec)	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC	SEC / IN PER SEC
* FAIL CODES (from reverse side if applicable)	F, G, P			
INSPECTION LABEL NO. (if applicable)				

RECOMMENDED WORK No Drop Test Performed. Improper Fusible Link Placement, 20" Below Ceiling. No Through Wall Penetration. Fusible Link Painted.

TESTED BY DEREK ESPINOZA WITNESSED BY Jared Jewell
 COMPANY Door Tech LLC REPRESENTING Door Tech LLC
 ADDRESS 5760 Cassman Loop SIGNATURE Jared Jewell
Palmer, AK 99645 RECOMMENDED WORK IS: AUTHORIZED ☐ DECLINED ☐

SIGNATURE [Signature] DATE 20 July 2017 BY [Signature] BID #B25-08
 REPAIR FIRE DOORS

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

FIRE AND SMOKE PROTECTION FEATURES

cation of the indicated terms used in this chapter. Terms may be defined in Chapter 2 or in another International Code® (I-Code®) as indicated in Section 201.3, or the dictionary meaning may be all that is needed (see also commentaries, Sections 201 through 201.4).

SECTION 703 PENETRATIONS

703.1 Maintaining protection. Materials and firestop systems used to protect membrane and through penetrations in *fire-resistance-rated* construction and construction installed to resist the passage of smoke shall be maintained. The materials and firestop systems shall be securely attached to or bonded to the construction being penetrated with no openings visible through or into the cavity of the construction. Where the system design number is known, the system shall be inspected to the listing criteria and manufacturer's installation instructions.

- ❖ The code mandates that all equipment, systems, devices and safeguards required by the current and previously adopted codes be maintained in good working order (see Section 102.1). This section reiterates that requirement specifically for fire-resistance-rated assemblies in existing buildings.

Once a building is occupied, its component parts are often damaged, altered or penetrated for installation of new piping, wiring and the like. These actions may reduce the effectiveness of assemblies that must be fire-resistance rated. This section requires the building owner, annually, to visually inspect nonconcealed elements and that any damage to a fire-resistance-rated assembly be repaired in a manner that restores the original required performance characteristics. Concealed elements must be visually inspected if they may be accessed by a door, removable ceiling tile, access panel or the like. Similarly, if a fire-resistance-rated assembly is altered or penetrated, the alteration or penetration must comply with the applicable requirements of the IBC for the particular type of alteration or penetration.

This section also requires that written records of maintenance and repairs to rated assemblies must be kept and should indicate the date, time and the name of the person conducting the inspection or repair for each rated assembly. These records must be maintained by the owner and made available to the fire code official for review when requested. This requirement relieves the fire code official of the administrative burden of maintaining test records. Note that, if the owner does not have the design number, the base inspection criteria would still apply, inspecting to make sure the system is properly secured and inspecting for visible openings through the system or into the cavity.

703.2 Repair of penetrations. Where damaged, materials used to protect membrane- and through-penetrations shall be replaced or restored with materials or systems that meet or exceed the code requirements applicable at the time when the assembly was constructed, remodeled or altered.

- ❖ This section provides specific language to clarify the intent of Section 703.1. Where protection of penetra-

tions and joints has been damaged, it needs to be repaired, not simply "maintained" in a damaged condition. The code recognizes that penetrations and joints that were protected in accordance with previous code editions may not have used the types of tested systems that are mandated in current building codes. Consequently, the section continues the allowance to grandfather installed penetration and joint seals when they are damaged but requires that they be repaired to meet the requirements that were applicable when the penetration or joint protection was installed.

SECTION 704 JOINTS AND VOIDS

704.1 Maintaining protection. Where required when the building was originally constructed, materials and systems used to protect joints and voids in the following locations shall be maintained. The materials and systems shall be securely attached to or bonded to the adjacent construction, without openings visible through the construction.

1. Joints in or between *fire-resistance-rated* walls, floors or floor/ceiling assemblies and roof or roof/ceiling assemblies.
2. Joints in *smoke barriers*.
3. Voids at the intersection of a horizontal floor assembly and an exterior curtain wall.
4. Voids at the intersection of a horizontal *smoke barrier* and an exterior curtain wall.
5. Voids at the intersection of a nonfire-resistance-rated floor assembly and an exterior curtain wall.
6. Voids at the intersection of a vertical *fire barrier* and an exterior curtain wall.
7. Voids at the intersection of a vertical *fire barrier* and a nonfire-resistance-rated roof assembly.

Unprotected joints and voids do not need to be protected where such joints and voids were not required to be protected when the building was originally constructed. Where the system design number is known, the system shall be inspected to the listing criteria and manufacturer's installation instructions.

- ❖ This section lists the specific locations where fire and smoke protection joints and voids need to be maintained. In general, these occur where two individual building protection elements come together and those elements need to be continually connected at their intersecting junction. There should be no visible openings or any way for fire and smoke to pass through. Note that this section is not intended to be retroactive in the addition of protection elements. As stated, joints and voids that were not required to be protected when the building was originally built are not required to have protection added as part of the building maintenance. However, if the listing information is available, the maintenance requirements provided by the manufacturer are to be followed.

704.2 Repair of joints and voids. Where damaged, materials used to protect joints and voids shall be replaced or restored with materials or systems that meet or exceed the code require-

- ❖ Similar to Section 703.2, this section provides specific language to clarify the intent of Section 704.1. Where protection of joints and voids is damaged, it needs to be repaired, not simply "maintained" in a damaged condition. The code recognizes that joints and voids that were protected in accordance with previous code editions may not have used the types of tested systems that are mandated in current building codes. Consequently, the section continues the allowance to grandfather installed systems when they are damaged but requires that they be repaired to meet the requirements that were applicable when the protection was installed.

❖ This section requires that fire door assemblies provided for protection of openings in vertical enclosures be self-closing or automatic-closing in order to maintain the integrity of the vertical opening enclosure. This section also recognizes that some opening protectives in existing buildings may already be equipped with heat-actuated closing devices rather than the smoke-detector-actuated devices otherwise required by the section. Such devices are allowed to continue in service, provided that the temperature rating of their fusible element is as low as is available [i.e., 135°F (57°C)] to provide the fastest possible operation in the event of a fire. In the event that an existing fusible link on an opening protective is rated higher than the maximum 135°F (57°C) allowed by this section, it would need to be removed and the door maintained as self-closing or be replaced with a smoke-detector-actuated closer in accordance with this section and Section 907.3. New opening protectives must comply with IBC Section 716. See the commentary to that section for further information.

SECTION 705

- ❖ This section provides a general reference to ensuing sections that list specific requirements for the maintenance of existing opening protectives that were required and installed as part of fire and smoke protection construction when the building was originally built.

dance with NFPA 80 and NFPA 105. Openings in smoke partitions shall be inspected and maintained in accordance with NFPA 105. Fire doors and smoke and draft control doors shall not be blocked, obstructed, or otherwise made inoperable. Fusible links shall be replaced promptly whenever fused or damaged. *Opening protectives* and smoke and draft control doors shall not be modified.

Proper maintenance necessitates that the manufacturer's installation instructions and the listing organization's instructions are followed in order to maintain the listing and proper operation of the assemblies and devices as required by the code, the manufacturer and the listing organization.

- ❖ This section addresses the very real issue of maintaining labeled opening protectives by requiring field-applied labels to follow the requirements of the third-party certification organization, which is accredited for listing the specific opening protective. The relabeling of existing fire doors is a common practice and, due to the importance of the rating requirements, a level of monitoring by a third party to ensure the labeling matches the rating of the door assembly is necessary.

BID #B25-08

705.2.2 Signs. Where required by the *fire code official*, a sign shall be permanently displayed on or near each *fire door* in letters not less than 1 inch (25 mm) high to read as follows:

1. For doors designed to be kept normally open: "FIRE DOOR—DO NOT BLOCK."
2. For doors designed to be kept normally closed: "FIRE DOOR—KEEP CLOSED."

❖ Any door in a fire-resistance-rated wall assembly represents a potential "weak link" in maintaining the degree of compartmentation intended. That is the reason for requiring a rated assembly. The IBC calls for adequate opening protection in the form of a door with a specified fire protection rating. This section allows the fire code official to require signage on or near the rated doors to make the occupants aware of the importance of the door as a fire- and life-safety feature. Also, see the commentary to Section 705.2.3 for a discussion on door closing and the improper use of props to hold doors open.

705.2.3 Hold-open devices and closers. Hold-open devices and automatic door closers, where provided, shall be maintained. During the period that such device is out of service for repairs, the door it operates shall remain in the closed position.

❖ The only devices acceptable for holding fire doors open are fire-detector-activated, automatic-closing devices that automatically close the doors (or allow the doors to swing closed using self-closing devices) in the event of a fire. Numerous devices, such as electromagnetic hold-opens, pneumatic systems and systems of pulleys and weights connected to a fusible link, are available.

The detection method for the closing device must be consistent with the purpose of the opening protective; that is, doors in smoke barriers must be activated by smoke detectors. Heat detectors or fusible links are adequate where maintenance of the fire-resistance rating alone is required.

Where smoke-detector-activated automatic door closers are used and the detectors are interconnected with a required fire alarm system, the devices and wiring methods must be checked for compatibility with the fire alarm system control panel before installation. Some fire alarm control equipment is compatible only with the manufacturer's automatic smoke detectors. Fire detectors used for automatic door release service in buildings that are not equipped with a fire alarm system must comply with Section 907.3.

A common violation of fundamental safety principles, as well as this section of the code, is having wooden or rubber wedges, or kick-down-type door hold-opens prop open fire doors or smoke barrier doors. This renders them totally ineffective as opening protectives. Building maintenance personnel who do not understand the purpose of these doors often do this to aid movement of people, equipment or air in a hallway or other area without realizing the potential hazard to life safety if a fire were to occur. This violation is especially problematic as it pertains to means of egress stairwells or horizontal exit doors as well. For further information on door closing requirements for fire doors, see IBC Section 716.2.6.

REPAIR FIRE DOORS

705.2.4 Door operation. Swinging *fire doors* shall close from the full-open position and latch automatically.

❖ Fire doors must be closed to be effective. Swinging fire doors should be frequently checked to make sure they close and latch on their own power from any position.

705.2.5 Smoke- and heat-activated doors. Smoke-activated doors shall be maintained to self-close or automatically close upon detection of smoke. Existing fusible-link-type automatic door-closing devices are permitted if the fusible link rating does not exceed 135°F (57°C).

❖ This section requires that fire door assemblies provided for protection of openings in vertical enclosures be self-closing or automatic-closing in order to maintain the integrity of the vertical opening enclosure. This section also recognizes that some opening protectives in existing buildings may already be equipped with heat-actuated closing devices rather than the smoke-detector-actuated devices otherwise required by the section. Such devices are allowed to continue in service, provided that the temperature rating of their fusible element is as low as is available [i.e., 135°F (57°C)] to provide the fastest possible operation in the event of a fire. In the event that an existing fusible link on an opening protective is rated higher than the maximum 135°F (57°C) allowed by this section, it would need to be removed and the door maintained as self-closing or be replaced with a smoke-detector-actuated closer in accordance with this section and Section 907.3. New opening protectives must comply with IBC Section 716. See the commentary to that section for further information.

705.2.6 Testing. Horizontal and vertical sliding and rolling *fire doors* shall be inspected and tested annually to confirm proper operation and full closure. Records of inspections and testing shall be maintained.

❖ Annual tests are intended to determine that required fire doors operate freely and close completely. Where fusible links are used as the releasing mechanism, the link may be temporarily removed rather than activated during testing. Fusible links in poor condition must be replaced as part of the maintenance of fire-resistance components. Smoke detectors and heat detectors other than fusible links must be tested as required by the manufacturer's instructions (see NFPA 72 for recommended testing procedures for various fire detectors).

This section also requires that written records of inspection and testing of opening protectives must be kept and should indicate the date, the time and the name of the person conducting the inspection or repair for each rated assembly. These records must be maintained by the owner and should be made available to the fire code official for review when requested. This requirement relieves the fire code official of the administrative burden of maintaining test records.

SECTION 706 DUCT AND AIR TRANSFER OPENINGS

706.1 Maintaining protection. Dampers protecting ducts and air transfer openings shall be inspected and maintained in

BID #B25-08

3.2.3 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.4* Listed. Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.5 Shall. Indicates a mandatory requirement.

3.2.6 Should. Indicates a recommendation or that which is advised but not required.

Δ 3.2.7 Standard. An NFPA Standard, the main text of which contains only mandatory provisions using the word “shall” to indicate requirements and that is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions are not to be considered a part of the requirements of a standard and shall be located in an appendix, annex, footnote, informational note, or other means as permitted in the *NFPA Manuals of Style*. When used in a generic sense, such as in the phrase “standards development process” or “standards development activities,” the term “standards” includes all NFPA Standards, including Codes, Standards, Recommended Practices, and Guides.

3.3 General Definitions.

3.3.1 Access Door. A door assembly, for installation in fire resistance-rated walls or for installation in ceilings of fire resistance-rated floor-ceiling or roof-ceiling assemblies, that is used to provide access to shafts, chases, attics, spaces above ceilings, or other concealed spaces.

3.3.1.1 Horizontal Access Door. An access door installed in the horizontal plane used to protect openings in ceilings of fire resistance-rated floor-ceiling or roof-ceiling assemblies.

3.3.1.2 Vertical Access Door. An access door installed in the vertical plane used to protect openings in fire-rated walls.

3.3.2 Active Leaf. The first operating door of a pair, which is usually the door in which a lock is installed.

3.3.3 Ambient. For the purposes of this standard, the temperature of the room in which the test is being conducted.

3.3.4 Anchor. A device for attaching frames to the surrounding structure.

3.3.5* Astragal.

3.3.5.1 Overlapping Astragal. A horizontal or vertical molding attached to one leaf of a pair of doors.

3.3.5.2* Split Astragal. A horizontal or vertical molding attached to both leaves of a pair of doors.

3.3.6 Automatic-Closing Device. A device that causes the door or window to close when activated by a fusible link or detector.

3.3.7* Automatic-Closing Door. A door that normally is open but that closes when the automatic-closing device is activated.

3.3.8 Automatic Fire Detector. A device designed to detect the presence of a fire signature and to initiate action. For the purpose of this standard, automatic fire detectors are classified as follows: Automatic Fire Extinguishing or Suppression System Operation Detector, Fire-Gas Detector, Heat Detector, Other Fire Detectors, Radiant Energy-Sensing Fire Detector, and Smoke Detector. [72, 2019]

3.3.9 Automatic Louver. An opening in a door with a series of slats or blades to allow passage of air and designed to close automatically in the event of fire.

3.3.10 Automatic Top and Bottom Bolts. See 3.3.68.1, Automatic Flush Bolts.

3.3.11 Barrel. A cylindrical horizontal member at the head of the opening that supports the door curtain of a rolling steel door and contains the counterbalance springs.

3.3.12 Batten. A horizontal pipe, tube, or other structural shape in a pocket of or attached to a fire safety curtain.

3.3.13 Binders. Pieces of hardware used to hold a sliding door to the wall, preventing lateral movement of the door from the wall.

3.3.14 Biparting. A vertically sliding door in which half of the door moves up and half of the door moves down in order to open, or a horizontal sliding door in which one door moves to the right and one moves to the left in order to open.

3.3.15 Bottom Bar (Rolling Steel Door). A reinforcing member at the lower edge of the door curtain assembly.

3.3.16 Breakaway Connection. A joint connecting a fire damper sleeve and attached ductwork that will allow collapse of the ductwork during a fire without disturbing the integrity of the fire damper.

3.3.17 Bumper (Fire Safety Curtain). A filled fabric pocket below the bottom batten or frame member of a fire safety curtain designed to press against the floor.

3.3.18 Bumpers. Stops to limit the closing or opening movement of a sliding door.

3.3.19 Ceiling Radiation Damper. A listed device installed in a ceiling membrane of a fire resistance-rated floor-ceiling or roof-ceiling assembly to automatically limit the radiative heat transfer through an air inlet/outlet opening. [5000, 2018]

3.3.20 Center Latch. A latch used to hold the two halves of a center-parting or biparting fire door together, which is usually two pieces surface-applied to doors and interlocked in the closed position.

3.3.21 Center Parting. See 3.3.14, Biparting.

3.3.22 Chafing Strip. A metal strip applied to the back surface of a sliding door to protect the door surface from damage from the wall.

3.3.23 Channel Frame. A frame that consists of head and jamb members of structural steel channels, either shop assembled or field assembled, to be used with masonry walls.

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-8

FIRE DOORS AND OTHER OPENING PROTECTIVES

NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*, 2018 edition.

NFPA 105, *Standard for Smoke Door Assemblies and Other Opening Protectives*, 2019 edition.

NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, 2017 edition.

NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*, 2015 edition.

NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, 2017 edition.

NFPA 288, *Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies*, 2017 edition.

NFPA 701, *Standard Methods of Fire Tests for Flame Propagation of Textiles and Films*, 2015 edition.

2.3 Other Publications.

2.3.1 ASME Publications. American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990.

ASME A17.1/CSA B44–2016, *Safety Code for Elevators and Escalators*, 2016.

2.3.2 ASTM Publications. ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

ASTM A36/A36M, *Standard Specification for Carbon Structural Steel*, 2014.

ASTM D4157, *Standard Test Method for Abrasion Resistance of Textile Fabrics (Oscillatory Cylinder Method)*, 2013 (2017).

ASTM D5034, *Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)*, 2016.

ASTM D6193, *Standard Practice for Stitches and Seams*, 2016.

ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, 2016a.

ASTM E648, *Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source*, 2017.

2.3.3 BHMA Publications. Builders Hardware Manufacturers Association, 355 Lexington Avenue, 15th Floor, New York, NY 10017.

ANSI/BHMA A156.1, *Standard for Butts and Hinges*, 2017.

ANSI/BHMA A156.4, *Standard for Door Controls (Closers)*, 2013.

ANSI/BHMA A156.17, *Standard for Self Closing Hinges & Pivots*, 2014.

ANSI/BHMA A156.26, *American National Standard for Continuous Hinges*, 2017.

N 2.3.4 FM Publications. FM Global, 270 Central Avenue, P.O. Box 7500, Johnston, RI 02919. www.fmglobal.com

FM 3210, *Heat Detectors For Automatic Fire Alarm Signaling*, 2007 edition.

2.3.5 GSA Publications. U.S. General Services Administration, 1800 F Street, NW, Washington, DC 20405.

Federal Specification A-A-1923A, *Shield Expansion (Lag, Machine and Externally Threaded Wedge)*, 1995.

Federal Specification A-A-1924A, *Shield, Expansion (Self Drilling Tubular Expansion Shell Bolt)*, 1995.

Federal Specification A-A-55614, *Shield, Expansion (Non-Drilling Expansion Anchors)*, 1995.

Δ 2.3.6 UL Publications. Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 9, *Standard for Fire Tests of Window Assemblies*, 2009.

ANSI/UL 10A, *Standard for Tin-Clad Fire Doors*, 2009.

ANSI/UL 10B, *Standard for Fire Tests of Fire Door Assemblies*, 2008.

ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*, 2016.

ANSI/UL 10D, *Fire Tests for Fire Protective Curtain Assemblies*, 2017.

ANSI/UL 14C, *Swing Hardware for Tin-Clad Fire Doors Mounted Singly and in Pairs*, 2006.

ANSI/UL 33, *Standard for Heat Responsive Links for Fire-Protection Services*, revised 2010.

ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*, 2011.

ANSI/UL 555, *Standard for Fire Dampers*, 2009.

ANSI/UL 864, *Standard for Control Units and Accessories for Fire Alarm Systems*, 2014.

2.3.7 Other Publications.

Merriam-Webster's *Collegiate Dictionary*, 11th edition, Merriam-Webster, Inc., Springfield, MA, 2003.

2.4 References for Extracts in Mandatory Sections.

NFPA 72®, *National Fire Alarm and Signaling Code*®, 2019 edition.

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 2014 edition.

NFPA 101®, *Life Safety Code*®, 2018 edition.

NFPA 5000®, *Building Construction and Safety Code*®, 2018 edition.

Chapter 3 Definitions

3.1 General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-16

FIRE DOORS AND OTHER OPENING PROTECTIVES

4.4.5.1 Maximum area of individual exposed lights shall be 1296 in.² (0.84 m²) with no dimension exceeding 54 in. (1.37 m) unless otherwise tested.

4.4.6 Each individual glazing unit shall be identified with a label that is visible after installation.

4.4.7 Viewers in fire doors shall be labeled.

Δ 4.5 Fire Resistance-Rated Glazing in Doors and Windows.

Fire resistance-rated glazing that limits the temperature rise on the unexposed surface and withstands the impact of the hose stream test as required for walls for the required duration in accordance with ASTM E119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, or ANSI/UL 263, *Standard for Fire Tests of Building Construction and Materials*, and is subsequently tested in accordance with NFPA 252; ANSI/UL 10B, *Standard for Fire Tests of Fire Door Assemblies*, or ANSI/UL 10C, *Standard for Positive Pressure Fire Tests of Door Assemblies*; or NFPA 257 or ANSI/UL 9 *Standard for Fire Tests of Window Assemblies*, shall be permitted in fire doors or windows having a fire protection rating of 3 hours or less and shall be limited to the maximum area tested. (See 6.3.3.3, 6.3.3.4, and Annex D.)

4.6 Classification of Hardware for Fire Doors.

4.6.1 Hardware required for the installation of all types of fire doors shall be as specified in those sections covering installation.

4.6.2 Hardware for fire doors shall be referred to as builders hardware or fire door hardware.

4.6.2.1 Fire exit hardware shall be within the category of builders hardware.

4.6.3 In this standard, builders hardware shall be applied only to swinging doors.

4.6.3.1* Builders hardware shall include hinges (full mortise, half mortise, half surface, full surface, olive knuckle, paumelle, or spring), single-, two-, or three-point locks and latches, top and bottom bolts (flush, surface, or concealed), and door closers.

4.6.3.2 Builders hardware shall not be required to be shipped from the factory with the fire doors.

4.6.3.3* Fire exit hardware shall consist of exit devices that have been labeled for both fire and panic protection.

4.6.4* Fire door hardware shall be applied to both swinging and sliding doors.

4.6.4.1 Fire door hardware that is applied to swinging doors shall consist of surface-mounted strap hinges, surface-applied latches, and closing devices.

4.6.4.2 In this standard, all hardware for sliding doors shall be fire door hardware.

4.6.4.3 Fire door hardware shall be shipped from the factory with the fire door.

4.7 Actuation Devices for Fire Doors, Fire Shutters, and Fire Windows.

4.7.1 General.

4.7.1.1 Actuation devices for the release of fire doors shall be permitted to be part of an overall system that releases the door,

such as a fire alarm, water flow alarm, or carbon dioxide release system.

4.7.1.2 Actuation devices and their components shall be installed in accordance with the manufacturers' instructions.

4.7.1.3 When the system or arrangement of detectors for an opening is not considered to be fail-safe, fusible links shall be used to ensure automatic closing of the door in the event of a power failure.

4.7.1.4 Fire doors that incorporate a device that delays activation of an automatic-closing, self-closing, or emergency power operation shall not delay the initiation of the closing or reclosing of the door for more than 10 seconds, unless acceptable to the authority having jurisdiction.

4.7.1.5* When actuation devices are used in conjunction with material handling systems, such as a conveyor, they shall be arranged in accordance with the following:

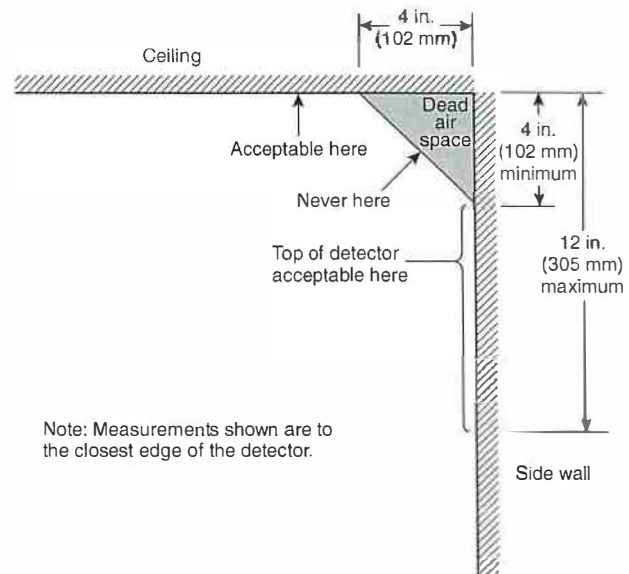
- (1) They shall stop the feed conveyor or otherwise initiate the mechanism that clears the path of the fire door.
- (2) They shall provide an adequate time delay to clear the opening that shall not exceed 10 seconds.
- (3) They shall activate the automatic- or self-closing mechanism.

4.7.2 Smoke Detectors. Where smoke detectors are used, they shall be located in accordance with NFPA 72.

4.7.3 Heat Detectors.

4.7.3.1 All heat detectors shall be placed as shown in Figure 4.7.3.1(a) and Figure 4.7.3.1(b), but in no event shall detectors be placed in the dead air space shown in Figure 4.7.3.1(a).

4.7.3.2 Unless otherwise acceptable to the AHJ, heat detectors shall be installed on both sides of the wall and interconnected so that the operation of any single heat detector causes the door to close.



Note: Measurements shown are to the closest edge of the detector.

Δ FIGURE 4.7.3.1(a) Proper Placement of Heat Detectors and Fusible Links.

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

GENERAL REQUIREMENTS

80-17

4.7.4 Fusible Links.

4.7.4.1* Except as required by 4.7.4.2 and 4.7.4.3, fusible links shall be placed as shown in Figure 4.7.3.1 (a).

4.7.4.2* Unless otherwise acceptable to the AHJ, fusible links shall be installed on both sides of the wall and interconnected so that the operation of any single fusible link causes the door to close.

4.7.4.3* Where fusible links are used, one fusible link shall be located near the top of the opening, and additional links shall be located at or near the ceiling on each side of the wall.

4.7.4.3.1 Where fusible links are installed on both sides of the wall, a sleeve shall be installed through the wall to provide an open pathway for the cable or chain connecting the fusible links.

4.7.4.3.2 The sleeve shall be ½ in. (13 mm) diameter galvanized steel conduit or pipe, with ends deburred, and fitted with a collar or bushing at each end to secure the sleeve around the wall and allow free movement of the cable or chain through the sleeve upon fusing of the links.

Δ 4.7.4.4 Fusible links shall be used when the system or arrangement of detectors for an opening is not considered to be fail-safe.

4.8 Supporting Construction.

4.8.1 Walls.

4.8.1.1 Walls shall be plumb and true, present smooth surfaces, and have a fire resistance rating as required by the AHJ.

4.8.1.2 Walls shall be of brick, concrete, or concrete masonry unit construction except that, where hollow concrete masonry units are used, all hollow cells within a minimum of 16 in. (406 mm) of the opening shall be filled with concrete.

4.8.1.3 Door assemblies shall be used on walls of other construction only where listed for such installation.

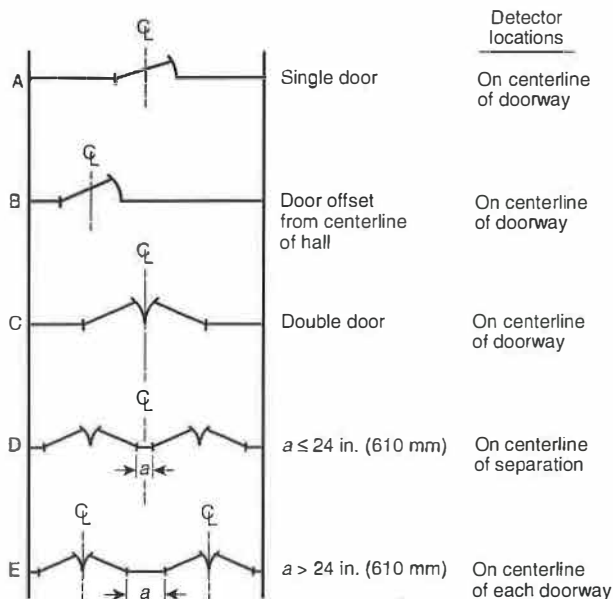


FIGURE 4.7.3.1(b) Heat Detector Locations.

4.8.1.4* Where hollow concrete masonry units are used and where tin-clad and sheet metal (corrugated) doors are mounted, the wall openings shall be reinforced to provide anchorage for door-mounting hardware equal to that of brick or concrete.

4.8.1.5* For tin-clad and sheet metal (corrugated) doors, continuous steel-bearing plates (crush plates) of ⅜ in. × 3 in. (4.76 mm × 76.2 mm) minimum dimensions shall be permitted to be used to bridge the cavities and to prevent the through-wall bolts from crushing the hollow blocks.

4.8.1.6 Door assemblies shall be used on walls of other construction only if listed for such installation.

4.8.2 Sills.

4.8.2.1 In buildings with noncombustible floors, a sill shall not be required, provided the floor structure is extended through the door opening.

4.8.2.2 In buildings with combustible floors or combustible floor coverings, a sill shall be required if the floor structure is extended through the door opening, as combustible floor construction shall not be permitted to extend through the door opening.

4.8.2.3 Door openings required to be protected by ½-hour or ⅓-hour rated fire protection door assemblies shall be exempted from the requirements of 4.8.2.2.

4.8.2.4 Sills shall be constructed of noncombustible materials.

4.8.2.5* For swinging doors with builders hardware and special-purpose horizontally sliding accordion or folding doors with frames having a jamb depth of 4 in. (102 mm) or less, the sill width shall be equal to the jamb depth.

4.8.2.6* Where frames have a greater jamb depth, the sills shall have a minimum width of 4 in. (102 mm) and shall be installed so that the sill extends from the face of the frame on the door side into the frame.

4.8.2.7 For swinging doors with fire door hardware, sills shall extend at least the depth of the door frame for flush-mounted doors.

4.8.2.8* For lap-mounted doors, sills shall extend beyond the opening for a length equal to the projection of the installed door or doors.

4.8.2.9* For horizontally sliding fire doors and vertically sliding fire doors, sills shall be constructed of noncombustible material and shall extend 6 in. (152 mm) past the edge of the opening on each side and 4 in. (102 mm) out from the face of the wall.

4.8.2.10 **Rolling Steel Fire Doors.** For rolling steel fire doors, sills shall be constructed of noncombustible material, shall extend past each jamb as necessary to be completely under the guides, and shall extend out from the centerline of the guide groove a minimum of 4 in. (102 mm) on each side to accommodate deflection of the bottom bar.

4.8.2.11 For service counter fire doors, sills shall be provided as part of the fire door assembly.

4.8.2.12 Flush concrete sills shall extend to the wall opening on both sides.

4.8.2.13* For swinging doors with builders hardware, horizontally sliding doors, and special-purpose horizontally sliding

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-18

FIRE DOORS AND OTHER OPENING PROTECTIVES

accordion or folding doors, raised noncombustible sills or thresholds shall be permitted wherever combustible floor coverings are contemplated or are in use on one or both sides of the door openings.

4.8.3 Lintels.

4.8.3.1 Lintels shall be brick, concrete or masonry arches, steel, or reinforced concrete.

4.8.3.2 Lintels of other types of construction shall be allowed when acceptable to the AHJ.

4.8.4 Clearance.

4.8.4.1* Clearance under the bottom of a door shall be a maximum of $\frac{3}{4}$ in. (19 mm).

N 4.8.4.2* Clearance under the bottom of the door shall be measured vertically from the bottom of the door to the top of the finished floor or threshold.

N 4.8.4.2.1 Where latching hardware devices project from the bottom of the door, the maximum clearance dimension under the door shall be in accordance with the hardware manufacturer's installation instructions not to exceed $\frac{3}{4}$ in. (19 mm).

N 4.8.4.2.2 Where a threshold is installed under a fire door, the clearance shall be in accordance with the hardware manufacturer's installation instructions and listing.

4.8.4.3* Products evaluated for fire doors with a bottom clearance in excess of $\frac{3}{4}$ in. (19 mm) and listed for use at or under the bottom of the fire door shall be permitted where installed in accordance with their listings.

4.8.4.4 Where the bottom of the door is more than 38 in. (965 mm) above the finished floor, the maximum clearance shall not exceed $\frac{3}{8}$ in. (9.5 mm) or as specified by the manufacturer's label service procedure.

4.8.5 Floor Coverings.

4.8.5.1 Combustible floor coverings shall be permitted to extend through openings required to be protected by 1 $\frac{1}{2}$ -hour, 1-hour, or $\frac{3}{4}$ -hour rated fire protection fire door assemblies without a sill where they have a minimum critical radiant flux of 0.22 W/cm² in accordance with NFPA 253 or with ASTM E648, *Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source*.

4.8.5.2 Combustible floor coverings shall not extend through openings protected by 3-hour rated fire protection door assemblies.

4.8.6* Where permitted by the individual door assembly listing, expansion anchors used in concrete, brick, or filled concrete masonry unit walls shall meet the following conditions:

- (1) Expansion anchors shall be manufactured from steel and shall be zinc-coated or cadmium-coated.
- (2) Expansion anchors shall conform to Federal Specification A-A-1923A, *Shield Expansion (Lag, Machine and Externally Threaded Wedge)*; A-A-1924A, *Shield, Expansion (Self Drilling Tubular Expansion Shell Bolt)*; or A-A-55614, *Shield, Expansion (Non-Drilling Expansion Anchors)*.
- (3) The compressive strength of the concrete shall not be less than 2000 psi (13,790 kPa), and the bolt load shall not exceed $\frac{1}{4}$ of the proof test load.

- (4) Where used in brick or filled concrete masonry unit walls, the bolt load shall not exceed $\frac{1}{2}$ of the proof test load.
- (5) The distance from the edge of the wall to the center of an expansion anchor shall be at least six times the diameter of the anchor. The distance between expansion anchors shall be at least eight times the diameter of the anchor.

Chapter 5 Inspection, Testing, and Maintenance

5.1* General.

5.1.1 Application.

5.1.1.1* This chapter shall cover the inspection, testing, and maintenance of fire doors, fire shutters, fire windows, and opening protectives other than fire dampers, fabric fire safety curtains, and fire protective curtain assemblies.

5.1.1.2 The requirements of this chapter shall apply to new and existing installations.

5.1.2 Operability.

5.1.2.1* Doors, shutters, and windows shall be operable at all times.

5.1.2.2 Doors, shutters, and windows shall be kept closed and latched or arranged for automatic closing.

5.1.2.3 Prevention of Door Blockage.

5.1.2.3.1 Door openings and their surrounding areas shall be kept clear of anything that could obstruct or interfere with the free operation of the door.

5.1.2.3.2 Where necessary, a barrier shall be built to prevent the piling of material against sliding doors.

5.1.2.3.3 Blocking or wedging of doors in the open position shall be prohibited.

5.1.3 **Replacement.** Where it is necessary to replace fire doors, shutters, windows or their frames, glazing materials, hardware, and closing mechanisms, replacements shall meet the requirements for fire protection and shall be installed and tested as required by this standard for new installations.

5.1.4 Field Labeling.

5.1.4.1 Field labeling shall be performed by the listing agency that maintains periodic inspections of production of the labeled equipment or materials under review, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

5.1.4.2 Individuals performing the service shall provide proof of qualifications to the authority having jurisdiction prior to performing work, as described in 5.1.4.1.

5.1.4.3 At a minimum, field labels shall contain the following information:

- (1) The words "field inspected" or "field labeled"
- (2) The words "fire door" or "fire door frame"
- (3) The marking of a third-party certification agency
- (4) The fire protection rating
- (5) A unique serial number (if provided by the listing agency)
- (6) The fire test standard designation to which the assembly was tested

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

INSPECTION, TESTING, AND MAINTENANCE

80-19

5.1.4.4 Field modifications shall not be permitted to be made to a non-fire-rated door assembly to achieve a fire rating unless the field modification is completed under label service.

5.1.4.5 Doors in which a field modification in accordance with 5.1.4.4 has been completed shall be labeled.

5.1.4.6 When an opening with a non-fire-rated door requires a fire door, the door assembly shall be replaced.

5.1.5 Field Modifications.

5.1.5.1* In cases where a field modification to a fire door or a fire door assembly is desired, and is not permitted by 4.1.3.2 through 4.1.3.2.5, the laboratory with which the product or component being modified is listed shall be contacted through the manufacturer and a written or graphic description of the modifications shall be presented to that laboratory.

5.1.5.2 Field modifications shall be permitted without a field visit from the laboratory upon written authorization from that laboratory.

5.1.5.3 When the manufacturer is no longer available, the laboratory shall be permitted to provide an engineering evaluation supporting the field modification.

5.1.6 Removal of Door or Window. Where a fire door or fire window opening no longer functions as an opening, or the door or window is removed and not replaced, the opening shall be filled to maintain the required rating of the wall assembly.

5.2* Inspection and Testing.

5.2.1* Upon completion of the installation, door, shutters, and window assemblies shall be inspected and tested in accordance with 5.2.4.

5.2.2* A record of all inspections and testing shall be signed by the inspector and kept for inspection by the AHJ.

5.2.2.1 Records of acceptance tests shall be retained for the life of the assembly.

5.2.2.2* Unless a longer period is required by Section 5.4, records shall be retained for a period of at least 3 years.

5.2.2.3* The records shall be on a medium that will survive the retention period. Paper or electronic media shall be permitted. [72:14.6.2.3]

5.2.2.4 A record of all inspections and testing shall be provided that includes, but is not limited to, the following information:

- (1) Date of inspection
- (2) Name of facility
- (3) Address of facility
- (4) Name of person(s) performing inspections and testing
- (5) Company name and address of inspecting company
- (6) Signature of inspector of record
- (7) Individual record of each inspected and tested fire door assembly
- (8)* Opening identifier and location of each inspected and tested fire door assembly
- (9)* Type and description of each inspected and tested fire door assembly
- (10)* Verification of visual inspection and functional operation
- (11) Listing of deficiencies in accordance with 5.2.3, Section 5.3, and Section 5.4

5.2.3 Acceptance Testing.

5.2.3.1* Acceptance testing of fire door and window assemblies shall be performed by a qualified person with knowledge and understanding of the operating components of the type of assembly being subject to testing.

5.2.3.2* Before testing, a visual inspection shall be performed to identify any damaged or missing parts that can create a hazard during testing or affect operation or resetting.

5.2.3.3 Acceptance testing shall include the closing of the door by all means of activation.

5.2.3.4 A record of these inspections and testing shall be made in accordance with 5.2.2.

5.2.3.5 Swinging Doors with Builders Hardware or Fire Door Hardware.

5.2.3.5.1 Fire door assemblies shall be visually inspected from both sides to assess the overall condition of door assembly.

5.2.3.5.2 As a minimum, the following items shall be verified:

- (1) Labels are clearly visible and legible.
- (2) No open holes or breaks exist in surfaces of either the door or frame.
- (3) Glazing, vision light frames, and glazing beads are intact and securely fastened in place, if so equipped.
- (4) The door, frame, hinges, hardware, and noncombustible threshold are secured, aligned, and in working order with no visible signs of damage.
- (5) No parts are missing or broken.
- (6) Door clearances do not exceed clearances listed in 4.8.4 and 6.3.1.7.
- (7) The self-closing device is operational; that is, the active door completely closes when operated from the full open position.
- (8) If a coordinator is installed, the inactive leaf closes before the active leaf.
- (9) Latching hardware operates and secures the door when it is in the closed position.
- (10) Auxiliary hardware items that interfere or prohibit operation are not installed on the door or frame.
- (11)* No field modifications to the door assembly have been performed that void the label.
- (12) Meeting edge protection, gasketing and edge seals, where required, are inspected to verify their presence and integrity.
- (13) Signage affixed to a door meets the requirements listed in 4.1.4.

N 5.2.3.5.3* Inspection Mark. Upon completion of inspection, an inspection mark shall be permitted to be applied to the assembly.

5.2.3.6 Horizontally Sliding, Vertically Sliding, and Rolling Doors.

5.2.3.6.1 Fire door assemblies shall be visually inspected from both sides to assess the overall condition of door assembly.

5.2.3.6.2 At a minimum, the following items shall be verified:

- (1) Labels are clearly visible and legible.
- (2) No open holes or breaks exist in surfaces of either the door or the frame.

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-20

FIRE DOORS AND OTHER OPENING PROTECTIVES

- (3) Slats, endlocks, bottom bar, guide assembly, curtain entry, hood, and flame baffle are correctly installed and intact for rolling steel fire doors.
- (4) Glazing, vision light frames, and glazing beads are intact and securely fastened in place, if so equipped.
- (5) Curtain, barrel, and guides are aligned, level, plumb, and true for rolling steel fire doors.
- (6) Expansion clearance is maintained in accordance with the manufacturer's listing.
- (7) Drop release arms and weights are not blocked or wedged.
- (8) Mounting and assembly bolts are intact and secured.
- (9) Attachments to jambs are with bolts, expansion anchors, or as otherwise required by the listing.
- (10) Smoke detectors, if equipped, are installed and operational.
- (11) No parts are missing or broken.
- (12)* Fusible links, if equipped, are in the correct location; chain/cable, s-hooks, eyes, and so forth, are in good condition; the cable or chain is not kinked, pinched, twisted, or inflexible; and links are not painted or coated with dust or grease.
- (13) Auxiliary hardware items that interfere or prohibit operation are not installed on the door or frame.
- (14) No field modifications to the door assembly have been performed that void the label.
- (15) Doors have an average closing speed of not less than 6 in./sec (152 mm/sec) or more than 24 in./sec (610 mm/sec).

5.2.3.7 Closing Devices.

5.2.3.7.1 All fire doors, fire shutters, and fire window assemblies shall be inspected and tested to check for proper operation and full closure.

5.2.3.7.2 Resetting of the automatic-closing device shall be done in accordance with the manufacturer's instructions.

5.2.3.7.3 Rolling Steel Fire Doors.

5.2.3.7.3.1 Rolling steel fire doors shall be drop-tested twice.

5.2.3.7.3.2 The first test shall be to check for proper operation and full closure.

5.2.3.7.3.3 A second test shall be done to verify that the automatic-closing device has been reset correctly.

5.2.3.8* Fusible links, release devices, and any other moveable parts shall not be painted or coated with other materials that could interfere with the operation of the assembly.

5.2.4 Periodic Inspection and Testing.

5.2.4.1* Periodic inspections and testing shall be performed not less than annually.

5.2.4.2 As a minimum, the provisions of 5.2.3 shall be included in the periodic inspection and testing procedure.

5.2.4.3 Inspection shall include an operational test for automatic-closing doors and windows to verify that the assembly will close under fire conditions.

5.2.4.4 The assembly shall be reset after a successful test.

5.2.4.5 Resetting of the release mechanism shall be done in accordance with the manufacturer's instructions.

5.2.4.6* Hardware shall be examined, and inoperative hardware, parts, or other defective items shall be replaced without delay.

5.2.4.7 Tin-clad and kalamein doors shall be inspected for dry rot of the wood core.

5.2.4.8 Chains, cables or ropes employed shall be inspected for excessive wear, stretching, degradation, and binding.

5.3 Retrofit Operators.

5.3.1 The operator, governor, and automatic-closing device on rolling steel fire doors shall be permitted to be retrofitted with a labeled retrofit operator under the conditions specified in 5.3.2 through 5.3.5.

5.3.2 The retrofit operator shall be labeled as such.

5.3.3 The retrofit operator shall be installed in accordance with its installation instructions and listing.

5.3.4 The installation shall be acceptable to the AHJ.

5.3.5 The retrofit operator shall be permitted to be provided by a manufacturer other than the original manufacturer of the rolling steel fire door on which it is retrofitted, provided its listing allows it to be retrofitted on that manufacturer's doors.

5.4* Performance-Based Option.

5.4.1 As an alternate means of compliance with 5.2.4, subject to the AHJ, fire door assemblies shall be permitted to be inspected, tested, and maintained under a written performance-based program.

5.4.2 Goals established under a performance-based program shall provide assurance that the fire door assembly will perform its intended function when exposed to fire conditions.

5.4.3 Technical justification for inspection, testing, and maintenance intervals shall be documented in writing.

5.4.4 The performance-based option shall include historical data acceptable to the AHJ.

5.5 Maintenance.

5.5.1* Repairs shall be made, and defects that could interfere with operation shall be corrected without delay.

5.5.2 Damaged glazing material shall be replaced with labeled glazing.

5.5.3 Replacement glazing materials shall be installed in accordance with their individual listing.

5.5.4* Any breaks in the face covering of doors shall be repaired without delay.

5.5.5 Where a fire door, frame, or any part of its appurtenances is damaged to the extent that it could impair the door's proper emergency function, the following actions shall be performed:

- (1) The fire door, frame, door assembly, or any part of its appurtenances shall be repaired with labeled parts or parts obtained from the original manufacturer.
- (2) The door shall be tested to ensure emergency operation and closing upon completion of the repairs.

5.5.6 If repairs cannot be made with labeled components or parts obtained from the original manufacturer or retrofitted in

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

SWINGING DOORS WITH BUILDERS HARDWARE

80-21

accordance with Section 5.3, the fire door frame, fire door assembly, or appurtenances shall be replaced.

5.5.7 When fastener holes are left in a door or frame due to changes or removal of hardware or plant-ons, the holes shall be repaired by the following methods:

- (1) Install steel fasteners that completely fill the holes.
- (2) Fill the screw or bolt holes with the same material as the door or frame.
- (3) Fill holes with material listed for this use and installed in accordance with the manufacturer's procedures.

5.5.8 Holes, other than those as described by 5.5.7, shall be treated as a field modification in accordance with 5.1.5.

Δ 5.5.9* Upon completion of maintenance work, fire door assemblies shall be inspected and tested in accordance with 5.2.3.

N 5.5.9.1 A record of inspections and testing, as required by 5.5.9, shall be made in accordance with 5.2.2.

N 5.5.9.2 A record of maintenance performed on existing fire door assemblies shall include the following information:

- (1) Date of maintenance
- (2) Name of facility
- (3) Address of facility
- (4) Name of person(s) performing maintenance
- (5) Company name and address of maintenance personnel
- (6) Signature of maintenance personnel performing the work
- (7) Individual listings of each inspected and tested fire door assembly
- (8)* Opening identifier and location of each repaired fire door assembly
- (9)* Type and description of each repaired fire door assembly
- (10)* Description or listing of the work performed on each fire door assembly

Chapter 6 Swinging Doors with Builders Hardware

6.1 Doors.

6.1.1 General. This chapter shall cover the installation of swinging doors with builders hardware.

6.1.2 Mounting of Doors. Swinging composite, hollow metal, flush sheet metal, metal-clad (kalamein), and wood core doors with builders hardware shall be flush mounted in labeled door frames.

6.1.3 Operation of Doors. All swinging doors shall be closed and latched at the time of fire.

6.1.3.1 For the purposes of 6.1.3, the operation of doors shall be divided into the following categories:

- (1) Self-closing doors
- (2) Automatic-closing doors
- (3) Power-operated fire doors

6.1.3.2 Self-Closing Doors.

6.1.3.2.1 Self-closing doors shall swing easily and freely and shall be equipped with a closing device to cause the door to close and latch each time it is opened.

6.1.3.2.2 The closing mechanism shall not have a hold-open feature.

6.1.3.3 Automatic-Closing Doors. Automatic-closing doors shall be permitted to close automatically by means of the installation of a closing device and one of the following:

- (1) A separate, labeled, fail-safe door holder/release device or a hold-open mechanism that shall be permitted to be an integral part of the basic closing device
- (2) An integral closing device that allows the door to swing freely and that automatically closes the door during an alarm condition, provided the hold-open mechanisms are released by one or a combination of automatic fire detectors acceptable to the AHJ

6.1.3.3.1 The fire door shall latch upon closure.

6.1.3.4 Power-Operated Fire Doors. Power-operated fire doors shall be equipped with a releasing device that shall automatically disconnect the power operator at the time of fire, allowing a self-closing or automatic device to close and latch the door regardless of power failure or manual operation.

6.2 Supporting Construction.

6.2.1 Walls. Wall openings shall be constructed to readily accept the fire door frame.

6.2.1.1 The frame shall be considered to be non-load bearing except where specifically designed to carry loads.

6.2.1.2 Frames shall be anchored securely to the wall construction.

6.2.2 Sills. Sills shall be installed in accordance with 4.8.2.

6.2.3 Lintels. Separate reinforcing units shall be provided for pressed steel door frames, where necessary, to support overhead wall loads over door openings.

6.3 Openings.

6.3.1 Door Frames.

6.3.1.1* Only labeled door frames shall be used.

6.3.1.2* Methods of anchoring shall be as shown in the listing.

6.3.1.3* Door frames intended for drywall installation shall be of the flush butt-mounted or wrap-around type, and anchors shall be secured in accordance with the manufacturer's instructions.

6.3.1.4* Proprietary-type slip-on door frames shall be installed in accordance with the manufacturer's installation instructions.

6.3.1.5 Door frames provided with expansion bolt-type anchors shall be installed in masonry walls only.

6.3.1.6 Steel-faced composite, hollow metal, metal-clad (kalamein), and flush sheet metal doors shall be installed in pressed steel or steel channel frames.

6.3.1.7* Clearances.

6.3.1.7.1* Clearances dimensions between doors and frames and meeting stiles of paired doors shall be measured on the pull side of the assemblies.

6.3.1.7.2* The clearances between the top and vertical edges of hollow metal doors and the frame, and the meeting stiles of

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-28

FIRE DOORS AND OTHER OPENING PROTECTIVES

9.2.1.3 Attachment of jambs to masonry, concrete, or brick shall be by expansion bolt-type anchors or in accordance with the individual manufacturers' published listings.

9.2.2 Sills. Sill shall be installed in accordance with 4.8.2.

9.2.3 Lintels.

9.2.3.1* Lintels shall be applied to or be an integral part of the ceiling.

9.2.3.2 If lintels are not a part of the ceiling assembly, they shall not reduce the fire resistance rating of the door assembly.

9.2.3.3 Applied lintels (headers) shall be in accordance with the manufacturer's published listings.

9.2.3.4 Fasteners, if required, shall be in accordance with the manufacturer's installation instructions with spacing over the door stack area equal to half that of normal spacing.

9.3* Clearances Around Openings. Clearances at the lintel, jambs, and meeting stiles shall not exceed $\frac{1}{8}$ in. (3.18 mm).

9.4 Assembly Components.

9.4.1 Closing Devices.

9.4.1.1 Closing devices shall be listed in accordance with ANSI/UL 864, *Standard for Control Units and Accessories for Fire Alarm Systems*.

9.4.1.2 Doors shall be self-closing or automatic-closing and shall not have a delay in the initiation of closing or reclosing of more than 10 seconds.

9.4.1.3 The average closing speed shall be not less than 6 in./sec (152 mm/sec) or more than 24 in./sec (610 mm/sec).

9.4.2 Power Operators.

9.4.2.1 Only labeled power operators listed for use on fire doors shall be permitted.

9.4.2.2 Where used in a means of egress, only labeled power operators listed in a category intended to facilitate safe egress of persons in case of emergency shall be used.

9.4.2.3 The power operator shall be rated for continuous use with unlimited duty cycle.

9.4.2.4 If closing is achieved by power operation, standby or emergency power shall be provided.

9.4.2.4.1 The standby or emergency power source shall have capacity to operate a minimum of 50 closing cycles of the door.

9.4.2.4.2 If door opening also is achieved by power operation, the standby or emergency power source shall have capacity to operate a minimum of 50 opening and closing cycles of the door.

9.4.2.5 Once the door is closed, power operation shall not occur if temperatures on either side of the door reach 500°F (260°C).

9.4.3 Hardware. Only hardware listed for use with the door shall be used.

Chapter 10 Vertically Sliding Fire Doors

10.1 Doors.

10.1.1 General. This chapter shall cover the installation of vertically sliding fire doors.

10.1.2 Mounting of Doors.

10.1.2.1 Vertically sliding doors of the tin-clad, sheet metal (flush and corrugated) types shall be wall mounted.

10.1.2.2 The tin-clad and sheet metal doors shall lap the opening at least 4 in. (102 mm) at the sides and top.

10.2 Supporting Construction.

10.2.1 Walls. Walls shall be reinforced as necessary to provide anchorage of wall-mounted pulleys that carry the weight of the door and counterbalances.

10.2.1.1 Attachment of Door Assembly.

10.2.1.1.1 Attachment of the door assembly to the wall shall be by means of through-wall bolts.

10.2.1.1.2 As an alternative, expansion anchors shall be permitted to be used.

10.2.2 Sills. Sills shall be installed in accordance with 4.8.2.

10.2.3 Lintels. Lintels shall be of brick, concrete, or masonry arches, steel, or reinforced concrete, as indicated in 4.8.3.

10.2.4 Vents.

10.2.4.1 Each tin-clad door shall be provided with 3 in. (76.2 mm) diameter vent holes.

10.2.4.2 Doors up to 6 ft (1.83 m) wide shall be provided with three vents, and doors over 6 ft (1.83 m) wide shall be provided with four vents.

10.2.4.3 The vent holes shall be cut through the sheets on the face of the door to be provided with the guide shoes, using care to avoid interference with the hardware or injury to the wood core when cutting the holes in the sheet.

10.2.4.4 The metal covering around the opening shall be secured with small nails spaced about 1 in. (25.4 mm) apart, and the exposed wood shall be painted.

10.3 Clearances. The clearances between the door and the wall when the door is in the closed position shall not exceed $\frac{3}{8}$ in. (9.53 mm).

10.4 Assembly Components.

10.4.1 Closing Devices.

10.4.1.1 Vertically sliding tin-clad, sheet metal, and sectional steel doors shall be equipped to close automatically at the time of fire.

10.4.1.2 Vertically sliding sectional doors shall close automatically upon operation of a fusible link or detector that releases the overhead sectional door, and the governor shall control the rate of descent.

10.4.1.3 Vertically sliding doors shall have an average closing speed of not less than 6 in./sec (152 mm/sec) or more than 24 in./sec (610 mm/sec).

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

ROLLING STEEL DOORS

80-29

10.4.2 Automatic Closers. Automatic-closing, vertically sliding doors shall be suspended by a system of weights and ropes, wire cables, or chains over pulleys.

10.4.2.1 All weights shall be enclosed in a substantial metal enclosure for the entire length of travel.

10.4.2.2 Pulleys over which the weight cable or chain passes shall be shielded to prevent the cable or chain from jumping off the pulley.

10.4.3 Fire Door Hardware.

10.4.3.1* Fire Door Hardware for Tin-Clad and Sheet Metal Doors. Only labeled fire door hardware shall be used.

10.4.3.1.1 Components. Fire door hardware shall consist of tracks, brackets, guides, bumpers, and counterbalancing mechanisms.

10.4.3.1.2* Track.

10.4.3.1.2.1 Two tracks, each with a length equal to twice the height plus 9 in. (229 mm), shall be provided.

10.4.3.1.2.2 The track shall be attached with track brackets at each bolt.

10.4.3.1.3 Guides.

10.4.3.1.3.1 Two track guides shall be provided for each track for openings 5 ft (1.52 m) or less in height.

10.4.3.1.3.2 An additional guide for each track shall be provided for each 2½ ft (0.76 m) or fraction thereof in excess of 5 ft (1.52 m) in height.

10.4.3.1.3.3 Each of the track guides shall be bolted through the door.

10.4.3.1.4 Cables.

10.4.3.1.4.1 Cables shall support the load.

10.4.3.1.4.2 Cable brackets shall be required and shall be bolted through the door.

10.4.3.1.4.3 Cable fasteners and thimbles shall be required.

10.4.3.1.4.4 Cable pulleys with frames and sheaves shall be bolted through the wall with ¼ in. (19.05 mm) bolts.

10.4.3.1.5 Chafing Strips.

10.4.3.1.5.1 Tin-clad and flush-type sheet metal doors shall be provided with two half-oval chafing strips for the back of doors not exceeding 8 ft (2.44 m) in width.

- (1) The length shall be 2 in. (50.8 mm) less than the height of the door.
- (2) The strips shall be held by ¼ in. (6.35 mm) through-bolts with countersunk heads and with nuts bearing against washers.
- (3) Where doors exceed the specified width, three strips shall be required.

10.4.3.1.5.2 Chafing strips shall not be required for corrugated doors.

10.4.3.1.6 Bumpers and Bumper Shoes.

10.4.3.1.6.1 One bumper shall be bolted to the top of each track with wall bolts.

10.4.3.1.6.2 Four bumper shoes shall be installed, one bumper at each corner of the door.

10.4.3.1.6.3 Each bumper shall be fastened to the faces and edges of the door by wood screws.

10.4.3.1.7* Rear Binders. Doors shall be provided with one rear binder located at the center of the lintel and attached with ¾ in. (19 mm) bolts.

10.4.3.1.8 Handles.

10.4.3.1.8.1 Flush pull handles on the wall side of the door shall be countersunk flush with the surface of the door.

10.4.3.1.8.2 Bow-shaped handles shall be bolted to the flush pull by through-bolts or otherwise securely attached.

10.4.3.2 Fire Door Hardware for Steel Sectional Doors.

10.4.3.2.1 Label. The fire door label on a sectional door shall include the hinged steel panels, wall guides, interlock at the top edge, vertical and horizontal tracks, roller wheels, counterbalance, automatic-closing mechanism, and governors.

10.4.3.2.2 Track. The horizontal track section shall extend from the wall a distance of the wall opening height plus 3 ft (0.91 m) and shall be connected by a fusible track link to the vertical track section such that the track breaks away from the vertical track section if subjected to damage from falling materials at the time of fire.

10.4.3.2.3 Guides.

10.4.3.2.3.1 The wall guides shall be plumb and bolted to or through the wall.

10.4.3.2.3.2 The guides shall extend above the wall opening a distance of 2½ in. (63.5 mm).

10.4.3.2.4 Interlocking. An angle-type interlock shall be bolted to the lintel and shall engage a matching pocket on the top edge of the door when in the closed position.

10.4.3.2.5 Counterbalancing Mechanism.

10.4.3.2.5.1 The sectional door shall be counterbalanced by an overhead horizontal helical spring on a shaft.

10.4.3.2.5.2 The shaft shall be attached to a reel with a steel cable attached to both sides of the door near the bottom edge.

Chapter 11 Rolling Steel Doors

11.1 Doors.

11.1.1 General. This chapter shall cover the installation of rolling steel fire doors.

11.1.2 Mounting of Doors.

11.1.2.1* The mounting for rolling steel doors shall be either face-of-wall mounted or between-the-jamb mounted.

11.1.2.2 The opening shall be protected by either a single door or double door installation as determined by the AHJ.

11.1.2.3 Rolling steel fire doors shall be permitted to be mounted to steel members set in or against the wall in accordance with their listing.

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

80-30

FIRE DOORS AND OTHER OPENING PROTECTIVES

11.2 Supporting Construction.

11.2.1 Walls. Walls shall be constructed in accordance with 4.8.1 and support the size and weight of the door assembly and its intended use.

11.2.2 Sills. Sills shall be constructed in accordance with 4.8.2.

11.2.3 Lintels. Lintels shall be constructed in accordance with 4.8.3.

11.3 Openings.

11.3.1 Fire door frames shall not be required for rolling steel fire door installations.

11.3.2 Where metal jambs are provided, only minimum $\frac{3}{16}$ in. (4.76 mm) nominal structural steel or formed steel shall be used.

11.3.3 Jambs shall be in accordance with the manufacturer's listing.

11.3.4 Items that are not a part of the fire door assembly shall not be field attached to any component of a rolling steel fire door.

11.3.5 Access to, and clearances between, surrounding construction and a rolling steel fire door shall allow for required testing and maintenance.

11.4 Assembly Components.

11.4.1 Closing Devices.

11.4.1.1 An automatic-closing device shall be installed on every rolling steel door.

11.4.1.2 Rolling steel doors shall close automatically upon activation or release of a fusible link or detector.

11.4.1.3 After automatic closing, the bottom bar shall come to rest in the closed position.

11.4.1.4 A governor, where provided, shall control the rate of descent of the door curtain during automatic closing.

11.4.1.5 Rolling steel fire doors shall have an average closing speed of not less than 6 in./sec (152 mm/sec) or more than 24 in./sec (610 mm/sec).

11.4.2* Power-Operated Rolling Steel Fire Doors.

11.4.2.1 Power-operated fire doors shall be permitted to be furnished with a sensor that causes the door closer to stop or reverse upon contact with an obstruction under normal conditions.

11.4.2.2 Power-operated rolling steel fire doors shall be equipped with an automatic-closing device that, upon activation, will cause the door to close.

11.4.2.2.1 After automatic closing is activated, the door shall remain in the closed position until the automatic-closing device has been reset.

11.4.2.2.2 When automatic closing is accomplished by means of a power operator, the door shall remain in the closed position or shall be permitted to automatically open and then reclose if a sensing edge has been provided and an obstruction is encountered during automatic closure.

11.4.2.2.2.1 The door shall remain in the closed position until the automatic closing device has been reset.

11.4.2.2.3 When an automatic closing device is designed to open and reclose when encountering an obstruction, the unit shall be designed such that it can reopen a maximum of three times.

11.4.2.2.3.1 After encountering an obstruction for the third time, the bottom bar shall come to rest on the obstruction.

11.4.3 Assembly of Rolling Doors.

11.4.3.1 Guides.

11.4.3.1.1 Guides for rolling steel fire doors shall be mounted either on the face of the wall or between the jambs, or a combination thereof.

11.4.3.1.2 The guides shall be mounted plumb and with the required clearances to allow for vertical expansion when exposed to fire.

11.4.3.1.3* The individual door manufacturer's written installation instructions and listing shall be consulted for the location and amount of clearance required.

11.4.3.1.4 The guides shall be permitted to be either exposed or concealed in a pocket or wall reveal.

11.4.3.1.5 Attachment of the guides to masonry wall construction shall be by means of through-wall bolts.

11.4.3.1.6 Attachment of guides to a wall of non-masonry construction shall be in accordance with the manufacturer's written installation instructions and listing.

11.4.3.1.7 As an alternative to 11.4.3.1.5, expansion anchors shall be permitted to be used in accordance with 4.8.6.

11.4.3.1.8 Where metal jambs that have been designed to support the size and weight of the door assembly for its intended function are used, guides shall be bolted to the jambs.

11.4.3.1.9 As an alternative to 11.4.3.1.8, guides shall be permitted to be welded to the jambs in accordance with the manufacturer's written instructions and listing.

11.4.3.2 Hoods.

11.4.3.2.1 A hood shall be provided.

11.4.3.2.2 Where a flame baffle is provided, a fusible link connection to the flame baffle shall be permitted to be independent of the detectors or fusible link connections that activate the door's automatic-closing device.

11.5 Weather Protection. Where rolling steel fire doors are installed on the exterior of a building, the doors shall be protected against the weather to ensure operation.

Chapter 12 Fire Shutters

12.1 Types. Fire shutters shall be of the following three general types:

- (1) Swinging door
- (2) Horizontally or vertically sliding door
- (3) Rolling steel door

APPENDIX 13: IFC AND NFPA 80 REFERENCE MATERIALS

HOISTWAY DOORS FOR ELEVATORS AND DUMBWAITERS

80-31

12.2 Requirements. The requirements of fire shutters shall be in accordance with the requirements for the general types shown in Section 12.1.

12.3* Weather Protection. Where rolling steel horizontally or vertically sliding fire shutters are installed on the exterior of a building, they shall be protected against the weather to ensure operation.

Chapter 13 Service Counter Fire Doors

13.1 Doors.

13.1.1 General. This chapter shall cover the installation of service counter fire doors.

13.1.2 Types. Service counter fire doors shall be of the following three general types:

- (1) Swinging door panels of a single or multiple section vertical type, integrally mounted in a four-sided frame to form a labeled door and frame assembly
- (2) Horizontally or vertically sliding door
- (3) Rolling steel fire door

13.2 Supporting Construction.

13.2.1 Walls. Walls shall be constructed in accordance with 4.8.1 and support the size and weight of the door assembly and its intended use.

13.2.2 Sills. Sills shall be constructed in accordance with 4.8.2.

13.2.3 Lintels.

13.2.3.1 Lintels shall be constructed in accordance with 4.8.3.

13.2.3.2 Heads of integral door frame assemblies shall not support a wall above.

13.2.3.3 Separate lintels of a size based on the type of wall construction and loads to be supported shall be provided.

13.3 Counters. Where counters are supplied separately from the balance of the door assemblies, they shall be labeled and installed in accordance with their listing.

13.4 Automatic Closing.

13.4.1 All service counter fire doors shall be equipped to close automatically in the event of fire.

13.4.2 A service counter fire door of the rolling type shall be automatic closing so that, upon activation or release of a fusible link or detector, the door shall close.

13.4.3 A service counter fire door of the swinging or sliding type shall be made automatic closing by a system of weights suspended by ropes, cables, or chains over pulleys that, when activated by release of an automatic fire detector, shall cause the door to close.

13.4.4 A governor, where employed on a service counter fire door, shall work in coordination with the closing device and shall control the closing speed of the door.

13.4.5 A service counter fire door of the rolling type shall have an average closing speed of not less than 6 in./sec (152 mm/sec) or more than 24 in./sec (610 mm/sec).

Chapter 14 Hoistway Doors for Elevators and Dumbwaiters

14.1 Doors.

14.1.1* General. This chapter shall cover only fire door assemblies in hoistway entrances directly connected with closed elevator or dumbwaiter operation and used in the vertical hoistway enclosure for the purpose of preventing the passage of fire through such entrances.

14.1.2 Components. Fire door entrances shall consist of fire door panels, frames, headers, track, hangers (some doors are provided with integral hangers), pendant bolts, sills, sill support plates, sill brackets, retaining angles, and a closer assembly.

Δ 14.1.3 Mounting of Doors. Fire door entrances used in elevator hoistways also shall conform to the requirements of ASME A17.1/CSA B44, *Safety Code for Elevators and Escalators*.

14.1.3.1 Fire door assemblies shall have fire protection ratings of ¾ hour, 1 hour, 1 ½ hours, or 2 hours (2 hours in Canada only).

14.1.3.2 Labeled hoistway door assemblies shall be installed in walls of approved fire resistance-rated construction.

14.1.3.3 Hoistway door frame assemblies shall be installed in accordance with the listing and labeling procedures, including the manufacturer's installation instructions.

14.1.3.4 Where horizontal sliding entrances without frames are used in masonry or concrete, the panels shall overlap the sides of the opening at least ⅝ in. (16 mm) beyond the thickness of any facing used to finish the opening.

14.1.3.5 Where vertically sliding entrances without frames are used in masonry or concrete, the panels shall overlap the top and bottom of the opening by at least 2 in. (51 mm) beyond the thickness of any facing used to finish the opening.

14.1.3.6 Where the entrance is too large for the regularly available test facilities, the certifying organization shall be permitted to issue oversize certificates or oversize labels.

14.2 Types of Doors.

14.2.1 Labeled Swing Hoistway Doors for Elevators and Dumbwaiters — Fire-Rated Entrance.

14.2.1.1 Each entrance shall be labeled.

14.2.1.2 Each label shall bear the name of the manufacturer.

14.2.1.3* Elevator Entrances.

14.2.1.3.1 One label shall be provided for the door panels and shall be located so that it is visible after installation.

14.2.1.3.2 One label shall be provided for the frame and shall be located so that it is visible after installation.

14.2.1.3.3 Where all entrance hardware components have not been tested in a complete assembly, individually labeled hardware components that are designed to be compatible with the entrance assembly shall be provided.

14.2.1.3.3.1 One label shall be permitted to be provided for the entrance hardware where the entrance hardware components are equivalent to those tested in a complete assembly.