

to be registered	Amount to be registered	share⁽²⁾	price⁽²⁾	registration fee
Federal Signal Corporation Common Stock, \$1.00 par value	3,800,000 ⁽¹⁾	\$6.33	\$24,054,000	\$1,715.05

(1) Pursuant to Rule 416(a), this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction. Represents the maximum number of additional shares of Common Stock available for issuance under the 2005 Executive Incentive Compensation Plan (2010 Restatement).

(2) Estimated solely for the purposes of computing the Registration Fee pursuant to the provisions of Rule 457(c) and (h), based upon the average of the high and low sale prices of common stock, \$1.00 par value, of the Registrant as reported on

the New York
Stock Exchange
on July 30,
2010.

PART I

The information specified by Item 1 and Item 2 of Part I of Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act of 1933 and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I will be delivered to the participants in the plan covered by this registration statement as required by Rule 428(b).

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

The undersigned registrant, Federal Signal Corporation (the Registrant), hereby files this Registration Statement on Form S-8 (this Registration Statement) to register 3,800,000 shares of the Registrant's common stock, \$1.00 par value (Common Stock), for issuance pursuant to the Federal Signal Corporation 2005 Executive Incentive Compensation Plan (2010 Restatement) (the Plan). The Registrant previously filed with the Securities and Exchange Commission (the SEC) on August 5, 2008, a Registration Statement on Form S-8 (Registration No. 333-127234) relating to securities offered under the 2005 Executive Incentive Compensation Plan, registering an initial 4,000,000 shares for distribution. The contents of such previously filed Registration Statement on Form S-8, including exhibits thereto, are incorporated herein by reference, except to the extent superseded or modified by the specific information set forth below or the specific exhibits attached hereto.

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Commission by the Registrant are incorporated herein by reference:

our Annual Report on Form 10-K for our fiscal year ended December 31, 2009, filed with the SEC on February 26, 2010;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2010 and June 30, 2010, filed with the SEC on April 30, 2010 and July 30, 2010, respectively;

our Current Reports on Form 8-K, filed with the SEC on January 7, 2010, January 15, 2010 (Item 1.01 only), January 21, 2010, March 4, 2010, March 5, 2010, March 10, 2010 (and the amendment thereto filed on May 19, 2010), March 22, 2010, April 30, 2010, May 17, 2010, and July 13, 2010; and

the description of our common stock, \$1.00 par value per share, as contained in our Registration Statement on Form 8-A effective pursuant to Section 12 of the Securities Exchange Act of 1934, including any amendments or reports filed for the purpose of updating such description.

All documents subsequently filed by the Registrant with the Commission pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), prior to the filing of a post-effective amendment to the Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in the Registration Statement and to be a part hereof from the date of filing of such documents (other than the portions of those made pursuant to Item 2.02 or Item 7.01 of Form 8-K or other information furnished to the SEC).

Any statement, including financial statements, contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or therein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement

Item 4. Description of Securities.

The class of securities to be offered is registered under Section 12 of the Exchange Act.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of Delaware allows a corporation to limit directors' personal liability to the corporation or its stockholders from monetary damages for breach of fiduciary duty as a director, with certain exceptions. Article Fourteenth of the Registrant's Restated Certificate of Incorporation provides such limitation to the fullest extent permitted by the General Corporation Law of Delaware.

Section 145 of the General Corporation Law of Delaware permits a corporation, subject to the standards set forth therein, to indemnify any person in connection with any action suit or proceeding brought or threatened by reason of the fact that such person is or was a director, officer, employee or agent of the corporation or is or was serving as such with respect to another entity at the request of the corporation. Article Fifth of the Registrant's Restated Certificate of Incorporation and Article VI of the Registrant's By-Laws provide for full indemnification of its directors and officers to the extent permitted by Section 145.

The Registrant maintains insurance policies indemnifying directors and officers against certain liabilities for actions taken in their capacities as such. Subject to the limits, retentions, exceptions and other terms and conditions of the policy, the Registrant's directors and officers are insured against liability for any actual or alleged error, misstatement, misleading statement, act or omission in the discharge of their respective responsibilities to the Registrant solely in their capacity as directors and officers of the Registrant.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Item 7. Exemption From Registration Claimed.

Not applicable.

Item 8. Exhibits.

See Exhibit Index.

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers and sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof), which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high and the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Village of Oak Brook, State of Illinois, on August 3, 2010.

FEDERAL SIGNAL CORPORATION

By: /s/ William H. Osborne
 William H. Osborne
 President and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Federal Signal Corporation, hereby severally and individually constitute and appoint William H. Osborne and Jennifer L. Sherman and each of them, the true and lawful attorneys and agents of each of us to execute in the name, place and stead of each of us (individually and in any capacity stated below) any and all amendments to this Registration Statement on Form S-8 and all instruments necessary or advisable in connection therewith and to file the same with the Securities and Exchange Commission, each of said attorneys and agents to have the power to act with or without the other and to have full power and authority to do and perform in the name and on behalf of each of the undersigned every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as any of the undersigned might or could do in person, and we hereby ratify and confirm our signatures as they may be signed by our said attorneys and agents and each of them to any and all such amendments and instruments.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
/s/ William H. Osborne William H. Osborne	President and Chief Executive Officer (Principal Executive Officer)	August 3, 2010
/s/ William G. Barker, III William G. Barker, III	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	August 3, 2010
/s/ Charles F. Avery, Jr. Charles F. Avery, Jr.	Vice President, Information Technology and Controller (Principal Accounting Officer)	August 3, 2010
/s/ James E. Goodwin James E. Goodwin	Chairman and Director	August 3, 2010
/s/ Charles R. Campbell Charles R. Campbell	Director	August 3, 2010
/s/ Paul W. Jones	Director	August 3, 2010

Paul W. Jones

Name	Title	Date
/s/ Dennis J. Martin	Director	August 3, 2010
Dennis J. Martin		
/s/ Richard R. Mudge	Director	August 3, 2010
Richard R. Mudge		
/s/ Brenda L. Reichelderfer	Director	August 3, 2010
Brenda L. Reichelderfer		
/s/ Dominic A. Romeo	Director	August 3, 2010
Dominic A. Romeo		
/s/ Joseph R. Wright	Director	August 3, 2010
Joseph R. Wright		

EXHIBIT INDEX

Exhibit No.

- 3.1 Restated Certificate of Incorporation of the Registrant filed as Exhibit 3.1 to the Registrant's Form 8-K filed April 30, 2007, and incorporated herein by reference.
- 3.2 Amended and Restated By-laws of the Registrant, as further amended, filed as Exhibit 3.2 to the Registrant's Form 8-K filed April 30, 2007, and incorporated herein by reference.
- 5.1* Opinion of Thompson Coburn LLP as to the legality of the securities being registered.
- 23.1* Consent of Thompson Coburn LLP (included in Exhibit 5.1).
- 23.2* Consent of Ernst & Young LLP.
- 24.1* Power of Attorney (set forth on signature page hereto).
- 99.1 Federal Signal Corporation 2005 Executive Incentive Compensation Plan (2010 Restatement), attached as Appendix B to the Registrant's Definitive Proxy Statement on Schedule 14A, filed by the Registrant on March 25, 2010, and incorporated herein by reference.

* Filed herewith.