Filed by: WESCO International, Inc. Pursuant to Rule 425 under the Securities Act of 1933 Subject Company: WESCO International, Inc. Commission File No.: 1-14989

The following is the text of the website that is being maintained at www.gbsc-usa.com/Wesco in connection with WESCO International Inc.'s offer to exchange up to \$345,000,000 aggregate principal amount of its newly issued 6.0% Convertible Senior Debentures due 2029 for its outstanding 1.75% Convertible Senior Debentures due 2026 and its outstanding 2.625% Convertible Senior Debentures due 2025.

Final Update: 4:30 p.m., New York City time, on August 21, 2009

Definitive Average VWAP and Definitive Initial Conversion Terms for WESCO International, Inc. Exchange Offer

On July 27, 2009, WESCO International, Inc. (the "Company") commenced an offer to exchange up to \$345,000,000 aggregate principal amount of its new 6.0% Convertible Senior Debentures due 2029 for its outstanding 1.75% Convertible Senior Debentures due 2026 and its outstanding 2.625% Convertible Senior Debentures due 2025. On August 21, 2009, the Company determined the definitive Average VWAP (as defined in the prospectus relating to the exchange offer (the "Prospectus")). Set forth below are the definitive Average VWAP, the resulting definitive initial conversion price and the resulting definitive initial conversion rate per \$1,000 principal amount of the 6.0% Convertible Senior Debentures due 2029 issuable in the exchange offer, calculated as described in the Prospectus.

Definitive Average VWAP: Resulting Definitive Initial Conversion Price: Resulting Definitive Initial Conversion Rate:

The exchange offer will expire at midnight, New York City time, on August 21, 2009, unless extended. Further information regarding the exchange offer can be found using the links below.

\$ 23.0925

\$ 28.8656

34 6433

[Link to Prospectus] [Link to Letter of Transmittal] [Link to Notice of Guaranteed Delivery] [Link to Notice of Withdrawal]

Further information regarding the exchange offer also can be obtained from Global Bondholder Services Corporation, the Information Agent for the exchange offer, at the address and telephone number below:

Global Bondholder Services Corporation 65 Broadway — Suite 723 New York, New York 10006 Attn: Corporate Actions Banks and Brokers call: (212) 430-3774 Toll-Free: (866) 488-1500

Rule 425 Legend

Non-Solicitation

This disclosure shall not constitute an offer to sell, buy or exchange or the solicitation of an offer to sell, buy or exchange any securities, nor shall there be any sale, purchase or exchange of securities in any jurisdiction in which such offer, solicitation, sale, purchase or exchange would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act of 1933, as amended.

Additional Information

In connection with the exchange offer, WESCO International, Inc. has filed a registration statement (including a prospectus) on Form S-4 (File No. 333-160818) and a tender offer statement on Schedule TO (File No. 005-58085) with the SEC. Holders of its 1.75%

Convertible Senior Debentures due 2026 and its 2.625% Convertible Senior Debentures due 2025 are urged to read the Prospectus, the Schedule TO and any other relevant documents, because they contain important information about WESCO International, Inc. and the exchange offer. The Prospectus is being sent to holders of the 1.75% Convertible Senior Debentures due 2026 and 2.625% Convertible Senior Debentures due 2025. The Prospectus and the other documents relating to the proposed transaction can be obtained free of charge from the SEC's website at www.sec.gov. These documents can also be obtained free of charge from WESCO International, Inc., Corporate Secretary, 225 West Station Square Drive, Suite 700, Pittsburgh, Pennsylvania 15219, or by calling (412) 454-2200.