



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-0404

Mail Stop 3561

November 6, 2007

By Facsimile and U.S. Mail

Mr. P. Ogden Loux
Chief Financial Officer
W.W. Grainger, Inc.
100 Grainger Parkway
Lake Forest, IL 60045-5201

Re: W.W. Grainger, Inc.
Form 10-K for the year ended December 31, 2006
Filed February 27, 2007
File No. 1-05684

Dear Mr. Loux:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. Please be as detailed as necessary in your explanation. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations, page 10

1. You discuss the business reasons for changes in the various line items of your consolidated statements of earnings. However, in circumstances where there is more than one business reason for the change, you should quantify the

incremental impact of each individual business reason discussed on the overall change in the line item. For example, you disclose that the increase in net sales for 2006 was led by strong sales to the commercial, government and manufacturing sectors. Also contributing to the improvement was growth from the U.S. market expansion program. Partially offsetting these sales improvements was the negative effect of the continued wind-down of low margin contracts with integrated supply and automotive customers. While this information is helpful, you do not quantify the extent to which income was affected by each of these reasons. Whenever possible, please quantify all line item changes with more than one business reason. Please refer to Item 303(a)(3) of Regulation S-K, Financial Reporting Codification 501.04, and SEC Release No. 33-8350.

Commitments and Other Contractual Obligations, page 17

2. In your table of contractual obligations, please include interest on long-term debt. See Item 303 (a)(5)(ii)(A) of Regulation S-K and Section IV of SEC Release 33-8350.

Consolidated Statements of Stockholders' Equity, page 36

3. Please tell us and clarify your disclosure to explain your accounting for the restricted stock units and the unearned compensation reflected under shareholders' equity. See paragraph 74 of SFAS no. 123(R).

Selected Quarterly Financial Data, page 61

4. You indicate that "In the fourth quarter of 2005, the gross profit margins were higher than the first three quarters. This primarily related to favorable inventory adjustments from fourth quarter physicals (\$18.6 million) and favorable adjustments related to the year-end LIFO calculations (\$9.5 million). Due to the improved methodology to capture data related to certain inventory transactions and estimates, these types of adjustments were spread throughout the year in 2006 as opposed to being recorded in the fourth quarter."

Please explain to us in detail the nature of the inventory adjustments referred to above and your basis under GAAP for spreading such favorable adjustments throughout the year in 2006.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter with your responses to our comments and provide any requested supplemental information. Please understand that we may have additional comments after reviewing your responses to our comments. Please file your response letter on EDGAR as a correspondence file.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that they have provided all information investors require for an informed decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

If you have any questions regarding these comments, please direct them to Robert Babula, Staff Accountant, at (202) 551-3339, Donna DiSilvio, Review Accountant, at (202) 551-3202 or, in their absence, to the undersigned at (202) 551-3841.

Sincerely,

Michael Moran
Branch Chief Accountant