



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 3720

April 28, 2006

John A. Martell
President and Chief Executive Officer
MISCOR Group, Ltd.
1125 South Walnut Street
South Bend, Indiana 46619

Re: MISCOR Group, Ltd.
Amendment No. 3 to Form S-1
Filed April 19, 2006
File No. 333-129354

Dear Mr. Martell:

We have reviewed your amended registration statement and your response letter filed April 19, 2006, and we have the following comments. Please amend the registration statement in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

General

1. Update the registration statement to provide the information as of the most recent date practicable. For example, you should provide disclosure about the number of shares outstanding and the beneficial ownership of your common stock as of date more recent than February 28, 2006.

Use of Proceeds, page 16

2. We note that you now intend to use any proceeds from the exercise of warrants to fund acquisitions of other businesses. Please disclose any current plans to use proceeds for acquisitions or state that you do not have any definite plans at this time. To the extent you have any plans, describe and identify the business being sought and disclose the status of any negotiations with respect to the acquisition. See prior comment 21 of our letter dated December 1, 2006.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 37

3. It appears that you have deleted much of the forward-looking information from your Results of operation subsection that you previously included in response to our prior comment 37 of our letter dated December 1, 2005. For instance, you no longer include a discussion of:
 - the anticipated increase in gross profit as a percentage of total revenues due to the reduced percentage of total revenues attributable to electrical contracting revenues;
 - the continued increase in general and administrative expenses, in part due to the expenses associated with the costs related to being a public company that you do not yet incur, and how you intend to pay for the expenses; and
 - future anticipated interest expense and amortization of debt issue costs.

Once again, please refer to the Commission's Interpretive Release No. 33-8350, "Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations," located on our website at <http://www.sec.gov/rules/interp/33-8350.htm>, which suggests that companies identify and disclose known trends, events, demands, commitments and uncertainties that are reasonably likely to have a material effect on financial condition or operating performance. As requested in our prior comment, please expand your discussion of any known trends or uncertainties that could materially affect your results of operations in the future.

Mr. John Martell
MISCOR Group, Ltd.
April 28, 2006
Page 3

* * * * *

Please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a response letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Please submit the response letter on EDGAR as correspondence. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Michelle Anderson, Legal Branch Chief at (202) 551-3833 with regard to these comments. Please contact me at (202) 551-3810 with any other questions.

Sincerely,

Larry Spigel
Assistant Director