

# **LEROY PALMER & ASSOCIATES PTY LTD**

## **CONSULTING ENGINEERS**

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**Structural Engineering  
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Project Management  
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29<sup>th</sup> October 2003

REF: 3000L01

Alquip Pty Ltd  
720 Greenwattle Street  
Toowoomba 4350

ATTENTION: Mr. Mark Evenden

Dear Mark

### **180 AND 220 SERIES SCAFFOLDS WELD CRACKING**

We write to address issues concerning weld cracks in the above mentioned scaffold systems. Two types of weld cracks may occur to the above-mentioned modular scaffolding system. They are "Crater" cracking and "Structural" weld cracks.

"Crater" cracking refers to the small shrinkage cracks that occur to a welded joint due to the heat loss immediately after fabrication of the welded joint. "Structural" cracking refers to weld cracks that occur during use due to fatigue and or overstress.

We wish to advise that the "Crater" weld cracking that occurs to the 180 and 220 series scaffold systems during fabrication is not considered to be of any structural significance and therefore does not require any rectification work.

AS/NZS 4576:1 1995 "Guidelines for scaffolding" provides criteria and recommendations as to the frequency of inspections of scaffolding components to ensure compliance with the original specification in terms of structural capability, material and physical shape. The inspections are required to be carried out by a suitably competent person. It is recommended that the suitably qualified person be sufficiently competent to differentiate between a "Crater" crack and "Structural" weld crack. During the regular inspections carried out on the scaffold components should a "Structural" weld crack be recorded then the weld crack should be ground out and repaired by re-welding to the original specification prior to further use.

Should you have any queries or require further information, please do not hesitate to contact me.

Yours sincerely



Leroy Palmer  
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**LEROY PALMER & ASSOCIATES PTY LTD**