

**Croci Australia Pty. Ltd.**

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Tuesday 30<sup>th</sup> May, 2006

Dear Valued Customer,

We are pleased to announce after months of vigorous testing by the CSIRO we have received a Bush Fire rating on our AR6, AR17 and AR12 Profiles. Accompanying this letter is a copy of the certificate as well as some technical data. Also there is a full version of the appraisal available at the following web site [www.smit.csiro.au/services/appraisals](http://www.smit.csiro.au/services/appraisals)

We are sure this will be beneficial to you in the marketing and advertising of our product to the general public.

If you require any further information please do not hesitate to contact Wayne Chambers or Warren Schmidt on (03) 9354 4777.

We would like to take this opportunity to thank you for your continuing support.

Best regards,

A handwritten signature in black ink, appearing to read 'Wayne Chambers', written over a horizontal line.

Wayne Chambers  
National Sales Manager

## TECHNICAL OPINION

In the opinion of CSIRO Appraisals, the AR6, AR12 and AR17 Rollita Roller Shutters™ manufactured by Croci Australia Pty. Ltd., Pascoe Vale, Victoria are suitable for the protection of windows from radiant heat from bushfires under the following conditions;

1. The AR6, AR12 and AR17 Rollita Roller Shutters™ are installed in accordance with the instructions from Croci Australia Pty. Ltd., Pascoe Vale, Victoria.

Note: These instructions are available from Croci Australia Pty. Ltd., Pascoe Vale, Victoria 3044 (Fax 03 9354 1944).

2. The shutter covers window framing as well as the glazed area of the window where bushfire protection is required.

Note: AR6, AR12 and AR17 Rollita Roller Shutters™ may need some repair or replacement after exposure to a bushfire depending on the level and the duration of exposure to radiant heating.

## BUILDING CODE of AUSTRALIA

In the opinion of CSIRO Appraisals, the systems described in this Technical Assessment and installed under the conditions listed herein will satisfy the performance required to protect windows of Clause GP5.1 (Volume 1 - Class 2 to Class 9 buildings) and Clause P2.3.4 (Volume 2 - Class 1 & 10 buildings) of the Building Code of Australia 2005.

### Notes:

- (i) The inclusion of this clause with reference to the BCA is aimed at assisting those involved in the design, specifying and building approval/permit process relate the Appraisal to the relevant Performance Requirements of the BCA.
- (ii) Any changes made to the BCA will be reviewed during the term of validity of this Technical Assessment and, where necessary, any amendment required will be published on the CSIRO Appraisals web pages on <http://www.cmit.csiro.au/>.

## RELATED INFORMATION

### VALIDITY OF THE ASSESSMENT

#### Condition:

This Technical Assessment applies only to the use of the AR6, AR12 and AR17 Rollita Roller Shutters™ as described herein.

#### Withdrawal:

This Technical Assessment will be withdrawn or amended if CSIRO Appraisals considers that a change in design or manufacturing quality renders the basis of appraisal invalid, or if reported field experience convinces CSIRO Appraisals of unsatisfactory quality or performance.

#### Term of Validity:

This Technical Assessment will lapse three years after the date of issue unless revalidation has been requested and granted (see back page). Technical Assessments may be amended during the term of validity. Users of this Technical Assessment should verify that it remains valid and is the current version by checking on the CSIRO Appraisals website:

<http://www.cmit.csiro.au/services/appraisals/>.

## RELEVANT DOCUMENTS

Croci Australia Pty. Ltd., Installation Procedures (26 October 2005).

## APPROVED ASSESSMENT EXTRACT

The AR6, AR12 and AR17 Rollita Roller Shutters™ manufactured by Croci Australia Pty. Ltd. (ACN 059 529 887), Pascoe Vale, Victoria is suitable for the protection of windows from radiant heat of bushfires when the conditions of CSIRO Appraisals Technical Assessment 329 are fulfilled.

## APPRAISAL

### DESCRIPTION

The following description is based on information provided by the applicant.

#### General:

The AR6, AR12 and AR17 Rollita Roller Shutters™ are a system of interlocking aluminium slats that are coated with a polyester paint and filled with a Polyurethane foam.

The shutter curtains run in extruded aluminium guides fitted with nylon pile each side to provide smooth rattle free operation.

Dimensions of shutters will vary according to the window it is fitted to. Shutters are available in 14 colours and range of hues.

AR6 Rollita Roller Shutter™ is available in 40 mm flat aluminium profile.

AR12 Rollita Roller Shutter™ is available in 53 mm curved aluminium profile.

AR17 Rollita Roller Shutter™ is available in 44 mm curved aluminium profile.

**Installation:**

The shutter curtain is rolled up on aluminium/galvanised extruded axle and is contained in an aluminium/colour bond pelmet. The head box and guides are fixed to the wall with secure attachment made through each guide either side of the shutter. The installation method is known as On-Wall installation which means that the guides and pelmet are slightly oversized for the window opening and are fitted to the face of the house structure. This provides enhanced protection by covering of most of the window frame in addition to the glazing.

**Operation:**

Operation is by electric motor or winch mechanism. Controls are fitted and operated from inside the building.

**Insulation:**

The shutter satisfies the requirements of Level 2 construction for protecting window openings from radiant heat in a high category bushfire as defined in AS 3959-1999 'Construction of Buildings in Bushfire-prone Areas.

## DESIGN INFORMATION

**General:**

The AR6, AR12 and AR17 Rollita Roller Shutters™ are used to provide radiant heat protection to windows.

**Durability:**

When installed in accordance with manufacturer's instructions, the structural integrity of the AR6, AR12 and AR17 Rollita Roller Shutters™ are guaranteed by the applicant for five years against failure and faulty manufacture and 12 months on parts.

They may need some repair or replacement after exposure to a bushfire depending on the level and the duration of exposure to radiant heating.

In exposure conditions rated as E3 in Australian Standard AS 3700 – 2001 'Masonry structures' a reduced lifespan may be expected in some extreme exposure conditions such as within 500m of a surf beach.

## BASIS OF APPRAISAL

CSIRO Appraisals has assessed the following aspects in undertaking this appraisal:

- (a) the effectiveness against exposure to radiant heat from bushfires
- (b) installation procedures, and
- (c) durability of the system.

The following documents and inspections were used in carrying out the appraisal.

**Manufacturer's Information:**

1. **Croci Australia Pty. Ltd. (ACN 059 529 887), 89-90 Derby Street, Pascoe Vale, Victoria 3044. Installation Procedures (26 October 2005).**  
These are the specifications and installation procedures of the AR6, AR12 and AR17 Rollita Roller Shutters™.

**Reports:**

1. **CSIRO Manufacturing and Infrastructure Technology, Julius Avenue, North Ryde, New South Wales, Report No FNA 0093 (September 2005):**  
This report is on the exposure of the AR6, AR12 and AR17 Rollita Roller Shutters™ to a simulated 'high' category bushfire as classified in AS3959-1999 'Construction in Bushfire-prone Areas'. The shutter protected timber frame windows to conditions to which they would be exposed in the simulated passing of a bushfire.

**Inspections:**

CSIRO Appraisals have inspected installations of the shutters and found their operation to be satisfactory.



S Hanson  
CSIRO Appraisals



BUILDING PRODUCTS & SYSTEMS

# Appraisals



CSIRO Appraisals is a project of CSIRO Building Construction and Engineering providing a range of assessment products including:

- Technical Assessments – full fitness for purpose appraisals of innovative products, systems or materials that may or may not be covered by Australian Standards or building regulations.
- Interim Reports – appraisals of products that have not yet reached the fully developed or manufacturing phase. They aid with product development and may be used as a step towards a subsequent Technical Assessment.
- Certification Assessments – appraisals of products, systems or materials solely against the requirements of the BCA and used for gaining approval from Federal or State authorities.

From 1978, under the auspices of the Australian Building Systems Appraisal Council (ABSAC), CSIRO ran an appraisal service in conjunction with the Australian Institute of Building Surveyors, the Housing Industry Association, the Insurance Council of Australia and the Master Builders Association. In 1999, CSIRO Appraisals was formed to continue the business of ABSAC under the sole patronage of CSIRO. This new scheme retains the committee structure of technical and interstate advisers that operated as ABSAC. All past ABSAC publications and appraisals are being continued and supported by CSIRO Appraisals.

CSIRO Appraisals is a founding member of the World Federation of Technical Assessment Organizations

Technical Assessments are intended to help all those concerned with the approval, specification and use of

new products or systems. They are objective assessments of the fitness for purpose of the product, system or material but are not approvals or endorsements. They may be submitted to approval authorities as part of the justification process required to obtain approval.

Each Technical Assessment has been prepared by CSIRO Appraisals and then reviewed, revised and finally endorsed by the Technical Advisory Committee (TAC), detailed below. CSIRO makes the appraisals on a national basis by obtaining input from regional committees in each State and Territory to take account of variations in local building regulations, practice and local climatic features.

CSIRO Appraisals bases its assessment on the product and information it receives and cannot accept responsibility for deviations in the manufactured quality and performance of the material, product or system. However, Technical Assessments will be withdrawn where adequate quality or performance has not been maintained.

Technical Assessments are given a term of validity of three years from the date of issue. They are reviewed at the end of the term of validity which may be extended for a subsequent three-year term. Technical Assessments may be amended during the term of validity. Users of Technical Assessments should verify that Technical Assessments remain valid and are the current version by checking on the CSIRO Appraisals website: <http://www.cmit.csiro.au/services/appraisals/>.

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		<b>H. RELATED DOCUMENTS</b>	
		<b>J. OTHER/OPTIONAL INFORMATION</b>	
<b>14. ABSTRACT</b> <i>(CSIRO Appraisals Approved Assessment Extract)</i> The AR6, AR12 and AR17 Rollita Roller Shutters™ manufactured by Croci Australia Pty. Ltd. (ACN 059 529 887), Pascoe Vale, Victoria is suitable for the protection of windows from radiant heat of bushfires when the conditions of CSIRO Appraisals Technical Assessment 329 are fulfilled.			



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BUILDING PRODUCTS & SYSTEMS

# Appraisals

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## TECHNICAL ASSESSMENT 329

February 2006

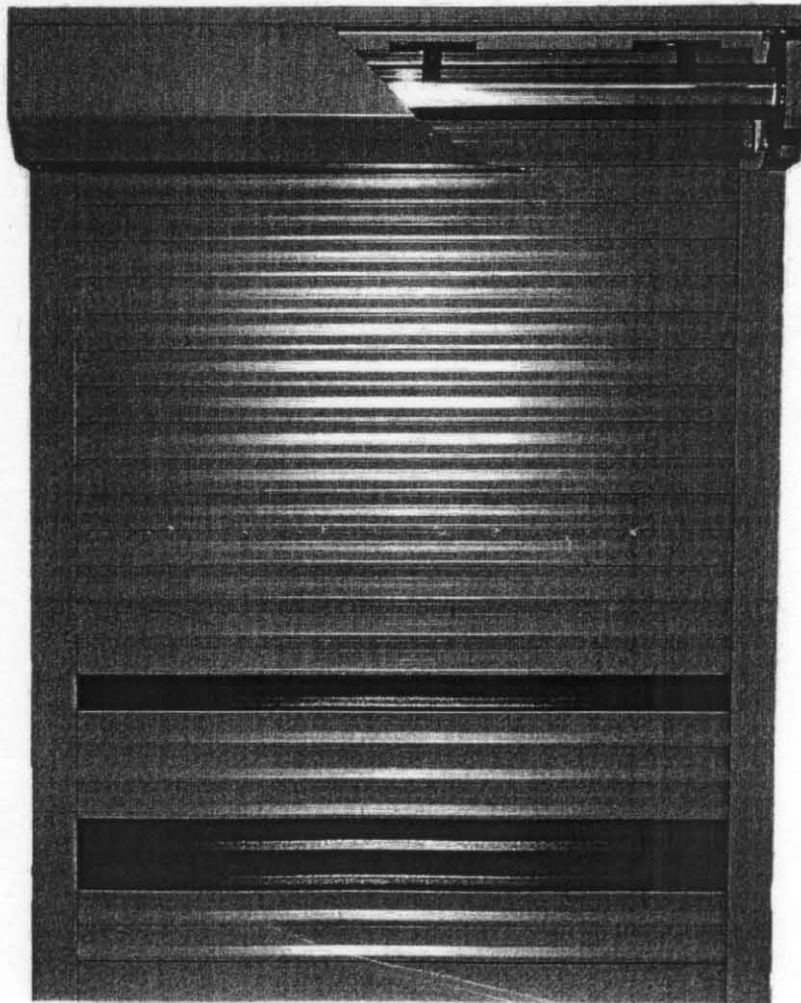
### AR6, AR12 and AR17 Rollita Roller Shutters™

#### PURPOSE

Roller shutter to provide protection to windows from radiant heat of bushfires

#### APPLICANT

Croci Australia Pty. Ltd. (ACN 059 529 887),  
89-90 Derby Street, Pascoe Vale, Victoria 3044  
(Manufacturer)





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# Appraisals

## Technical Assessment 329

### AR6, AR12 and AR17 Rollita Roller Shutters™

#### Assessment

The AR6, AR12 and AR17 Rollita Roller Shutters™ manufactured by Croci Australia Pty. Ltd. (ACN 059 529 887), Pascoe Vale, Victoria, is suitable for the protection of windows from radiant heat of bushfires when the conditions of CSIRO Appraisals Technical Assessment 329 are fulfilled..

#### Applicant

Croci Australia Pty. Ltd. (ACN 059 529 887), 89–90 Derby Street, Pascoe Vale, Victoria 3044 (manufacturer).

#### Term of Validity

Until February 2009.

S. Hanson  
Project Leader  
CSIRO Appraisals

CSIRO Manufacturing & Infrastructure Technology