Kinnaird House
Trehearne Architects



## Introduction

The Kawneer GT70 Window is an elegant aluminium fenestration solution designed specifically to replicate the appearance of steel windows. Suitable for installation in new build or refurbishment projects, the GT70 window combines the optimum technical performance expected of today's aluminium windows, with the fine sightlines characteristic of original steel windows. These slender sightlines are enhanced further by optional bevelled designed feature caps adding a unique sculptured effect to the external surface of the building.

# GT70 Window

## Construction

Framing construction incorporates fill and debridge thermal break with resin. All frames have mechanically jointed and adhesive bonded corners. Installation can be by the direct fix method or by twist in fixing lugs.

# Glazing

Inward opening windows are internally glazed and outward opening windows are externally glazed, with a maximum glass thickness of 54mm for fixed lights and vents (inside glazed) and 33mm (outside glazed).

# Weather Performance

Air Infiltration Grade C at 600Pa Watertightness no leakage at 600Pa Wind Resistance up to 2000Pa\*

\*2000 special is dependant upon correct mullion and transom selection to suit span and spacing per project.

## Product Features

- Fine sightline characteristics of steel windows
- Suitable for composite and ribbon windows
- Option for open out or open inwards
- A range of structural and coupling mullions available
- Special bevelled beads
- Concealed drainage system

# With the decisive advantage of...

- Particularly suitable for refurbishment projects
- Replication of steel with additional benefits associated with aluminium such as the high strength to weight ratio
- Offers wide choice of aesthetics

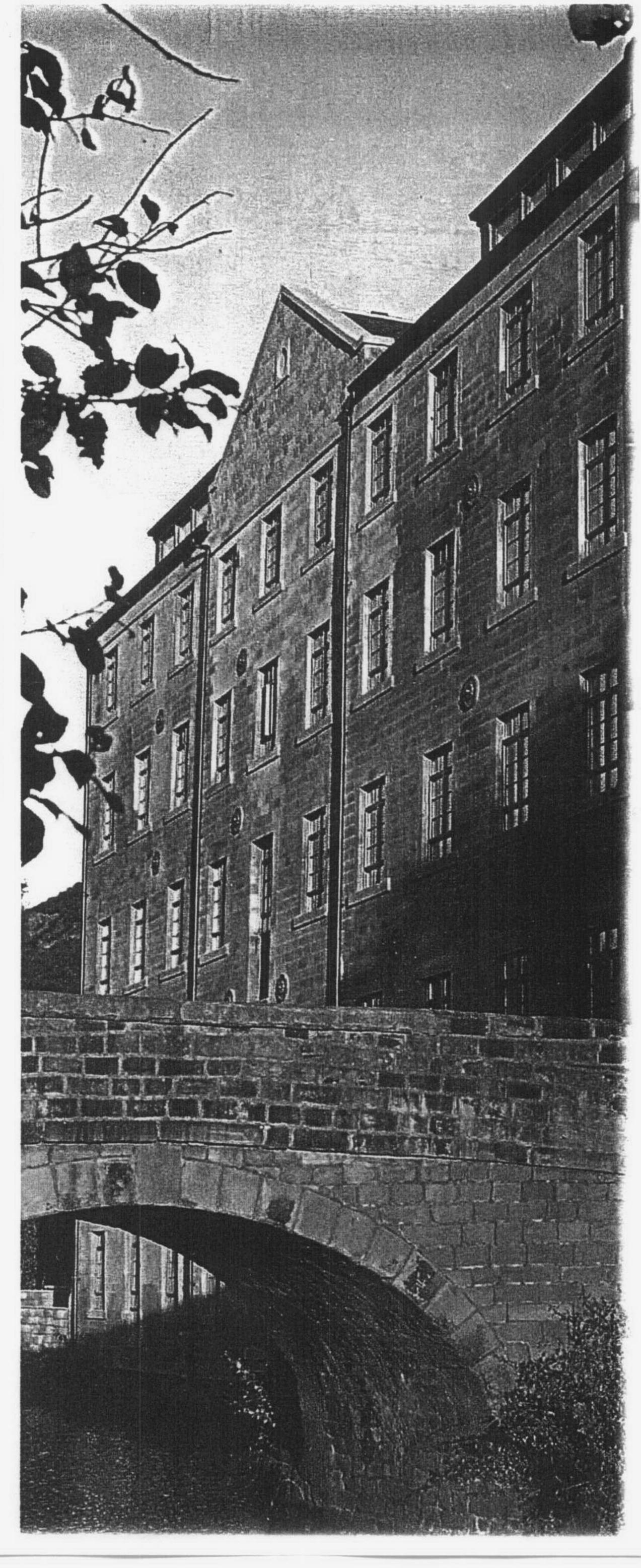
# Case Study

The sympathetic refurbishment of formerly derelict Woodhouse Mill, a six-storey Grade II listed building situated on the banks of the Rochdale canal on the outskirts of Todmorden, features Kawneer's GT70 windows as replacements for the mill's original steel windows.

Built in 1832, Woodhouse Mill was on the Listed Buildings At Risk register until local business man, Charles Moran of Langdale Estates Ltd, had the vision to save the building and turn it into a stylish residential development.

The refurbishment process involved extensive consultation with planners and bodies such as English Heritage and the Victorian Society, with the intention to retain as many of the mill's original features as possible.

Commenting on the refurbishment of the fenestration, Graham Newton of Ramsden Barrett Architects says, "The Kawneer GT70 window was chosen because of its slim sightlines, which makes it a suitable choice for refurbishment projects like Woodhouse Mill, where there is a requirement to retain the traditional elegance of the original steel windows".



Woodhouse Mill, Todmorden

Ramsden Barrett Architects

SG Aluminium Ltd

**ISSUE 1** 

#### Introduction

- Aluminium framing construction incorporates fill and debridge thermal break with resin to produce fixed frames and opening frames to suit performance and cost requirements.
- With the use of extruded gasket profiles, this system achieves its weathering performance by means of drained and ventilated glazing rebates.
- The window system is solely manufactured in the UK by Kawneer.

### **Product Definition**

- Top hung (open out) or side hung (open in or open out) options for ventilation or fixed lights
- Tilturn options bottom hung for ventilation and side hung open in for ease of cleaning
- Optional bevelled designed feature caps
- Bevelled beads for external glazing
- A range of structural and coupling mullions available suitable for composites and ribbon windows
- Open Out option outside glazed
- Open In option inside glazed
- Gasket glazed up to 54mm (open in) and 33mm (open out)

## **Reference Documents**

- BS EN 755 Extruded aluminium profiles
- BS 3987 1991 Specification for anodic coatings
- BS 6496 1984 Specification for powder organic coatings
- BS 6375 Part 1 1989 Classification of weathertightness
- BS 5368 Part 1 1976 Air permeability test
  Part 2 1980 Watertightness test
  - Part 3 1978 Wind resistance test
    Part 4 1978 Form of test report
- BS 4873 1986 Specification for aluminium alloy windows
- BS 4255 Part 1 1986 Specification for non-cellular gaskets
- ISO 9001 1994 Quality assurance system

## Weather Performance

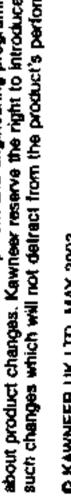
- Air Infiltration: Grade C at 600pa
- Watertightness no leakage at 600pa
- Wind resistance up to 2000pa\*
- \*2000 special is dependant upon correct mullion and transom selection to suit span and spacing per project.

## **Product Features**

- Slim sightlines
- Optional bevelled design feature caps
- Special bevelled beads
- Odd and even leg outer frames
- Open in and open out vents in one system

## Accessories

- Locking and non locking cockspur handles open out only
- Friction stays open out
- Butt hinges
- Turn lock option open in
- Fixing lugs
- Fireman s axe open in
- Espagnolette multi-point locking gear







### **ISSUE 1**

## Glazing

- Open Out version outside glazed only
- Open In version inside glazed only
- Inside glazed glazing and panels up to 54mm thickness can be accommodated
- Outside glazed glazing and panels up to 33mm

#### Construction

- All frames have mechanically jointed and adhesive bonded corners
- Weathering is achieved by the use of EPDM gaskets
- Pressure equalised system

## **Materials**

 Aluminium profiles are extruded from 6063T6 alloy. Screws and components are corrosion resistant materials.

#### **Surface Finishes**

Over 130 standard and 31 metallic Kawneer Permacover and permacover plus polyester paint finishes are available. A range of standard and coloured anodised finishes are also available. Colour samples are available on request from the Marketing Department at Runcorn. The finishes coatings are covered by standard guarantees; 15 years gloss, 25 years matt and metallic for Permacover and up to 25 years for anodised. Guarantees are subject to application and Kawneer acceptance in marine, industrial, swimming pools or other aggressive atmospheres.

### Fabrication and Installation

— All Kawneer products are fabricated and installed by a network of trained authorised Kawneer dealers, offering national support at local level. The Kawneer Training Centre provides specific product knowledge training, installer training, registration and certification in accordance with the CWCT (Centre for Window and Cladding Technology). For dealers in your area contact the Sales Department at Runcorn.

## Cleaning and Maintenance

- Cleaning and Maintenance instructions are available from our Head Office at Runcom.

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