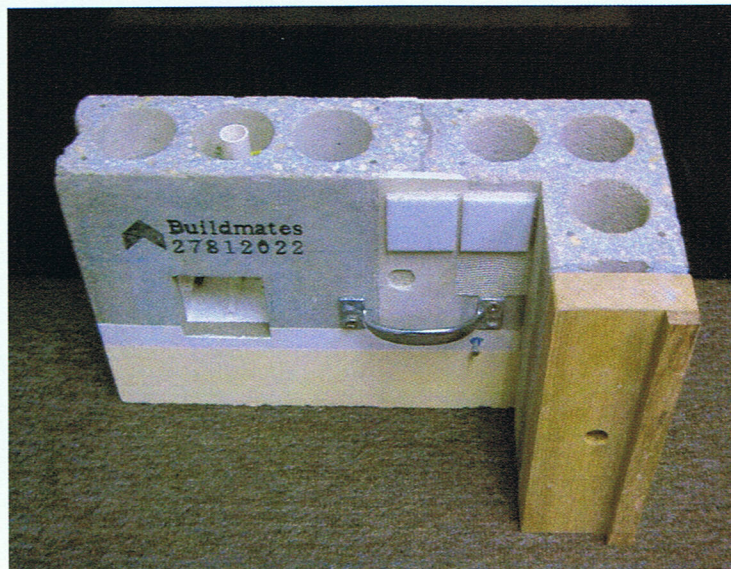




Buildmates Wall (Brief)



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A. The Introduction of the Product

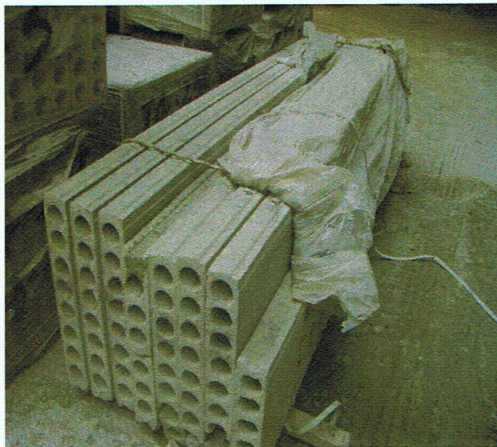
A.1 What is Buildmates Wall ?

A.1.1 Partition Wall constructed by the use of Custom- made Buildmates Panels and associated Buildmates jointing / fixing accessories.

A.1.2 Buildmates Panels designed with tubular voids and made from reinforced concrete in the compressive strength of 20 MPa and formed with vertical mould.

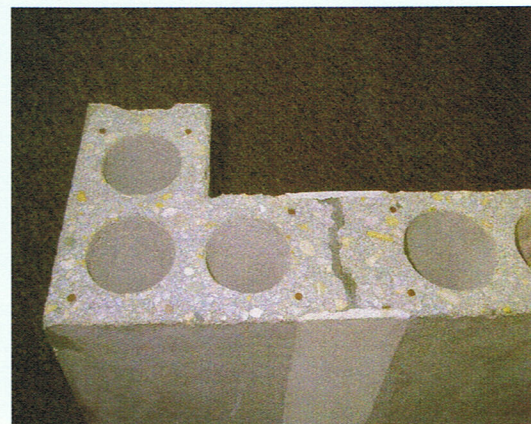


A.2 Panel Profile and Section



Buildmates Panel Profile

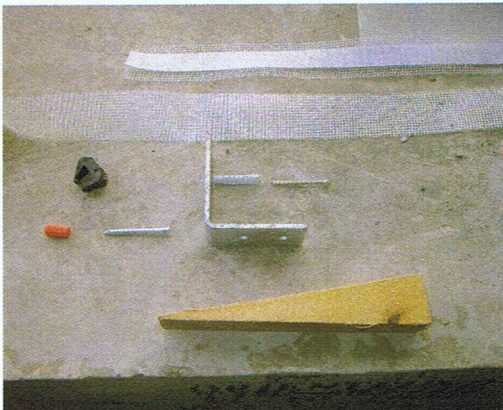
Buildmates Panel Section





A.3 Accessories and Completed Installation

Buildmates Accessories



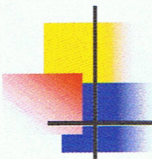
**Completed
Installation**



A.4 Sizes of Wall Panels Suitable for Site Installation (2 workers / gang)

Thickness (mm)	75	85	100	120	150
Nominal Width (mm)	600	600	600	600	600
Effective Width (mm)	595	595	595	595	595
Length	To fit the ceiling height				
Max. Wall Height (mm)	3350	3150	3150	2850	2650

Thickness of wall subject to the client's requirements for acoustical performance and fire resistance period.



A.5 Acoustical Performance

Test to be conducted in accordance with BS5821: 1984, the weighted sound reduction index as follows:


Thickness (mm)	75	85	100	120	150	100 with grouted hollow cores	120 with grouted hollow cores	150 with grouted hollow cores	170 Double layers of 75 with grouted hollow cores and in-filled with glass fibre felt between panels
Sound Reduction (dB)	42	43	45	46	47	48	50	51	55



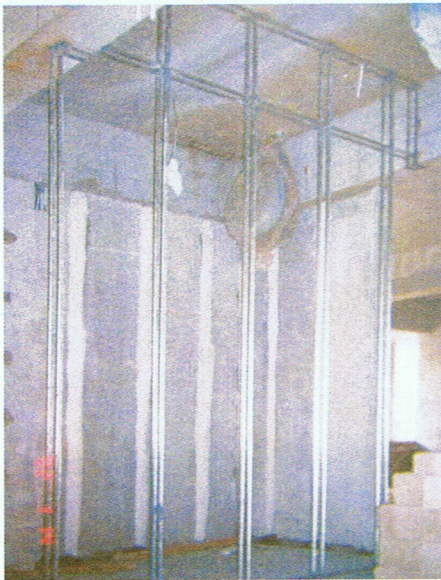
A.6 Fire Resistance

BS476: Part 2

Wall Thickness (mm)	75	85	100	120	150	100 with grouted hollow cores	120 with grouted hollow cores	150 with grouted hollow cores
Integrity (hr)	2.00	2.40	3.20	3.60	4.00	4.80	5.60	6.40
Insulation (hr)	1.25	1.5	2.00	2.25	2.50	3.00	3.50	4.00



A.7 Special High Wall



**Steel
Frame**



**Infilled
Panel**



For special high wall, steel framing is required



B Historical Background

B.1 Establishment

B.1.1. Establishment of Buildmates Wall system since 1996 by the Buildmates Building Technology Ltd. of Hong Kong.

B.1.2 The system has been used in Housings, Schools and Hotels over hundred projects.

B.2 Buildmates Factory



Annual Output : 600,000m²



B.3 Qualification

Buildmates Wall complies with BS5234 : Part 2 : 1992 and JG 3063-1999, and has been recognized by the following authorities:

- Hong Kong Architectural Services Department (香港建築署)
- Hong Kong Building Department (香港屋宇署)
- Hong Kong Housing Authority (香港房屋委員會)
- Shenzhen Construction Bureau (深圳市建設局)
- Wall Reformation Office, Guangzhou (廣州市牆體材料革新辦公室)
- National Bureau of Construction Materials China (中國國家建材局)
- Buildmates licensed manufacturer has been certified to comply with ISO 9001 : 2000
(標特美特許生產商已取得ISO 9001: 2000認證)



B.4 Job Reference

Buildmates Wall has been used in over hundred projects such as:

<u>Project</u>	<u>m²</u>	<u>Client</u>
Langham Hotel 朗豪酒店	30,000	The Great Eagle
Hong Kong Disney's Hollywood Hotel 香港迪士尼荷里活酒店	30,000	Hong Kong Disneyland
Parkside Services Apartment Phase 1 and 2 太古廣場一及二期	12,000	Swire Properties
124-142 Yeung UK Road 樂悠居	54,000	Chinese Estates Holding Limited
Clear Water Bay Road No.8 清水灣道8號	18,000	MTR
The Legend 名門	55,000	Cheung Kong

B.5 Langham Hotel

朗豪酒店



B.6 Hong Kong Disney's Hollywood Hotel 香港迪士尼荷里活酒店




B.7 Parkside Services Apartment Phase 1 and 2 太古廣場一及二期



B.8

The Legend
名門





C. Planning & Drawings

C.1 Planning, Submission and Approval

C.1.1 Preparation of shop drawings

All E&M services layout with setting out plan are required for preparation of partition layout plan and shop drawings. Shop drawings should be submitted for Client / Architect / M&E Consultant / Main Contractor for approval.

C.1.2 Locating plan indicating quantities and locations to be stacked on working floors

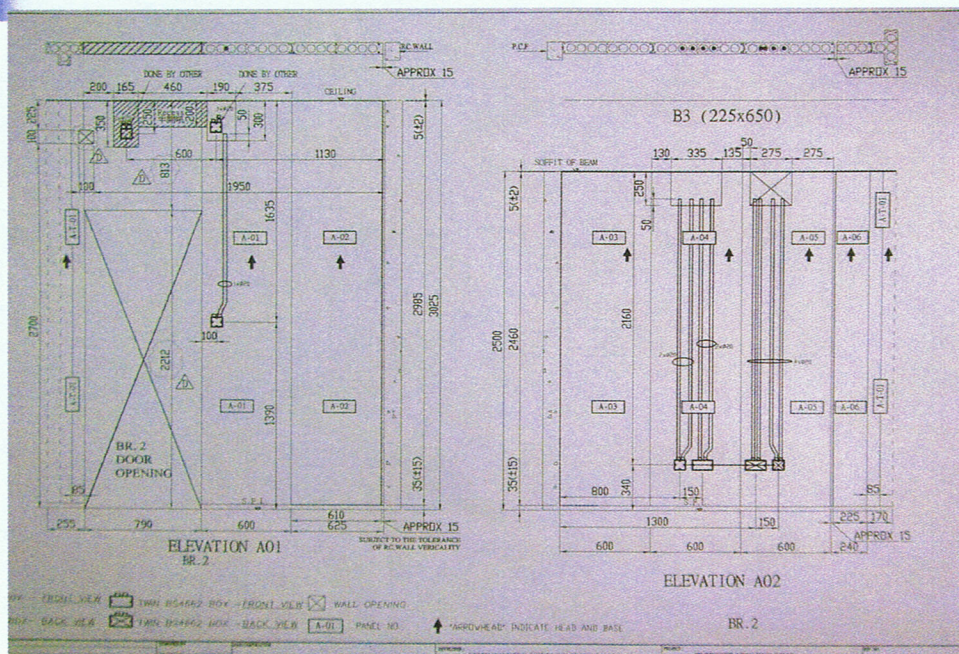
All panels to be delivered to site during superstructure stage, same as precast facade units. Location plan indicating quantities and location to be stacked on working floor should be submitted for Main Contractor's approval.

C.1.3 Details of panels

Panel label should be submitted for storage and installation to minimize horizontal transportation.



C.2.2 Configuration of Buildmates Wall (Elevation)





D. Precasting & Pre-installed Conduits

D.1 Batching Plant



D.2 Vertical Casting





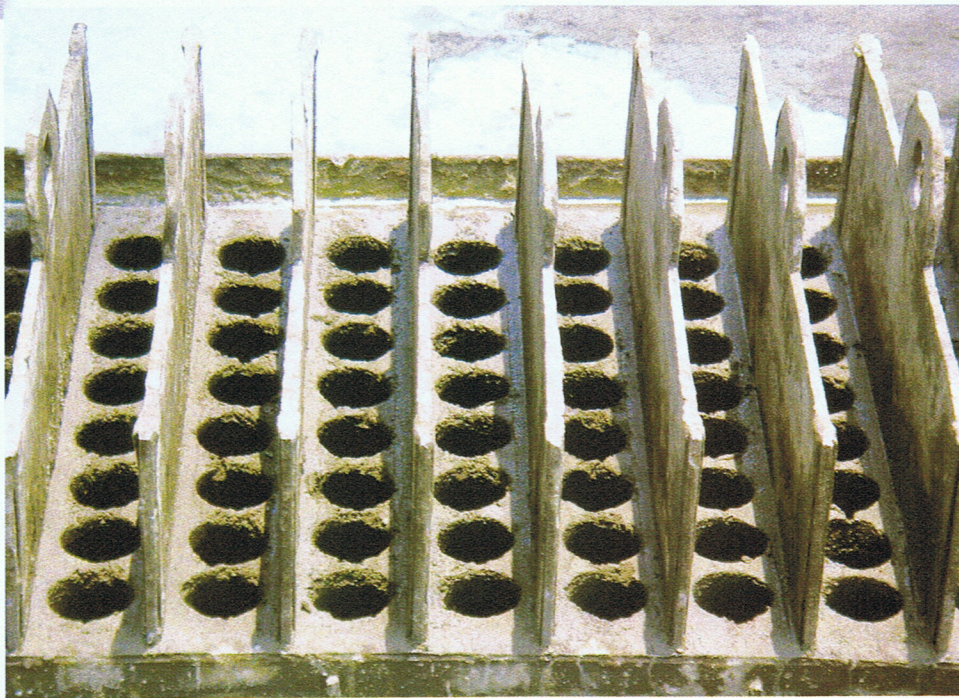
D.3 **Withdrawing of Void Bars**



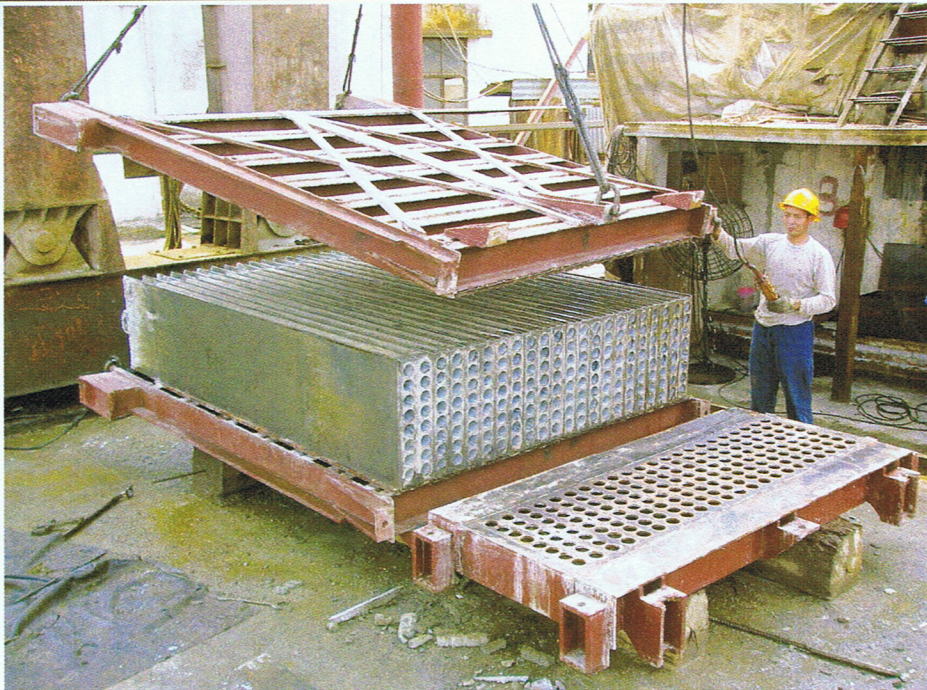


D.4

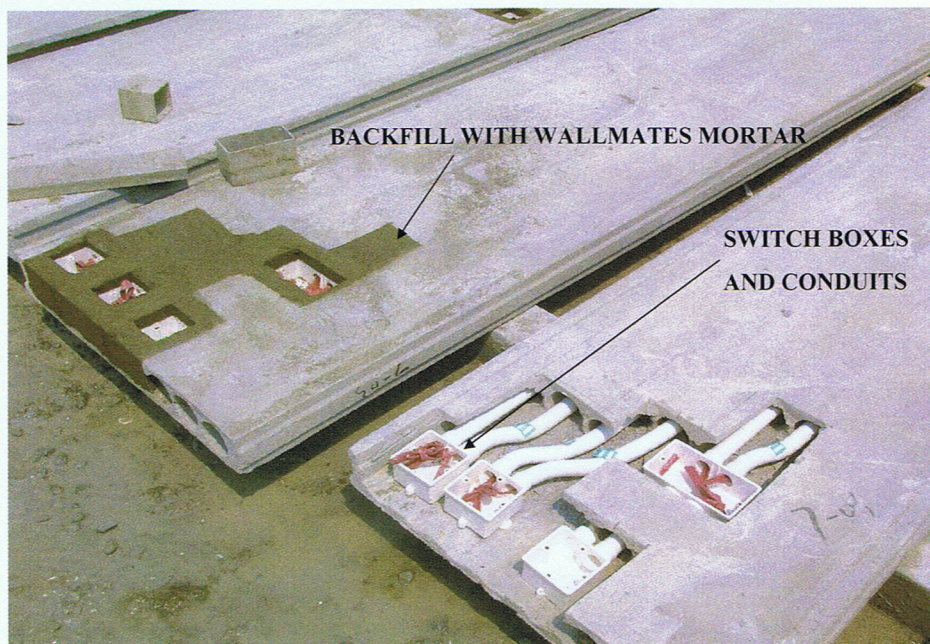
Vertical Moulding



D.5 Demoulding



D.6 Pre-installed Conduits and Switch Boxes in Panels





D.7 Custom-made Units



D.8 Panels Awaiting Delivery





E. Installation & Fixings

E.1 Pre-Packed Panels Stacking on Site



E.2 Lifting to Floor

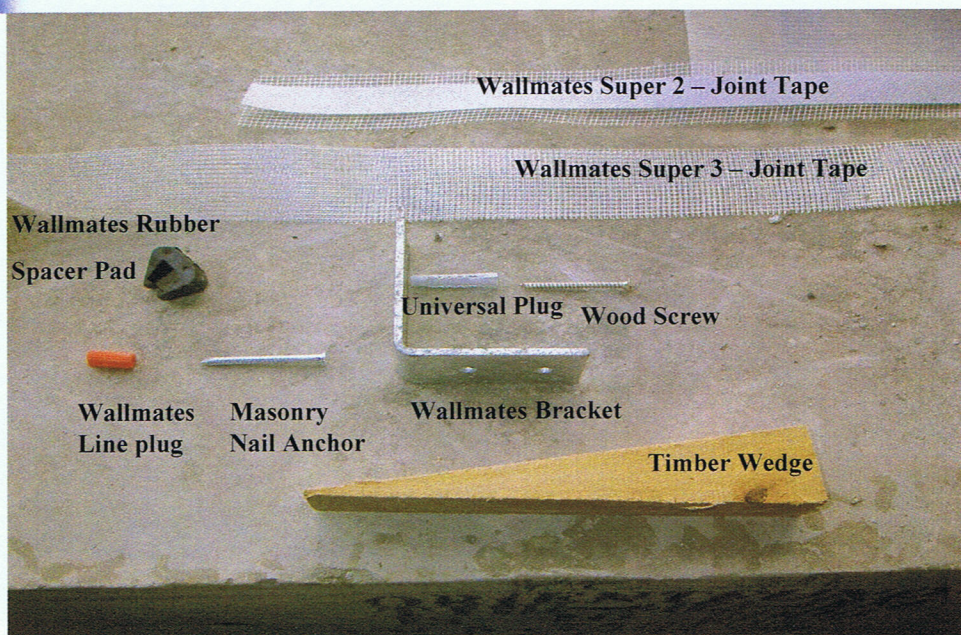


E.3 Stacking on Floor



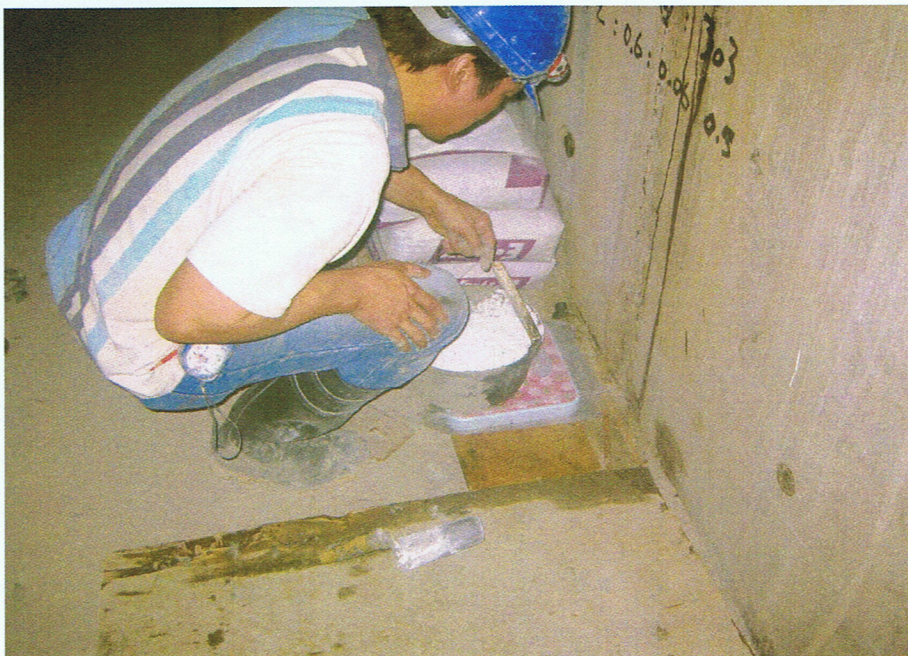
E.4

Buildmates Accessories



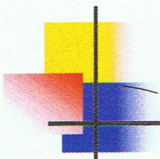


E.5 Mixing of Wallmates Mortar

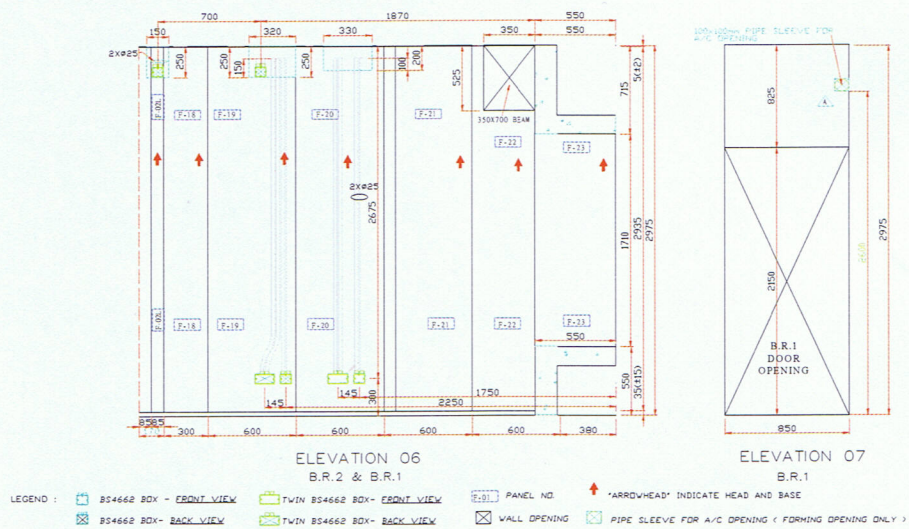


E.6 Application of Bitumen Paint to the Interface on Precast Facade






E.7 Reading Drawings before the Erection



E.8 Distribution of Panel by Trolley





E.9 Rendering on the Edge with Wallmates Mortar



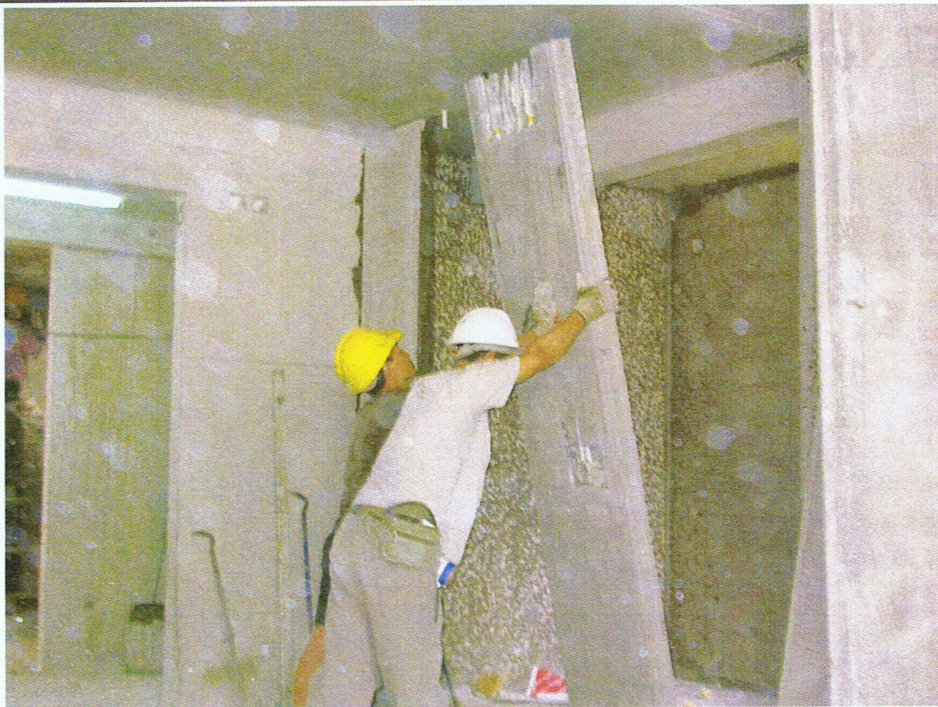


E.10 Rendering on the Head with Wallmates Mortar





E.11 Erecting up to Ceiling



E.12

Positioning



E.13 Check the Verticalities in two Directions



E.14 Filling up the Base with Wallmates Mortar





E.15 Connection of Ceiling Conduits





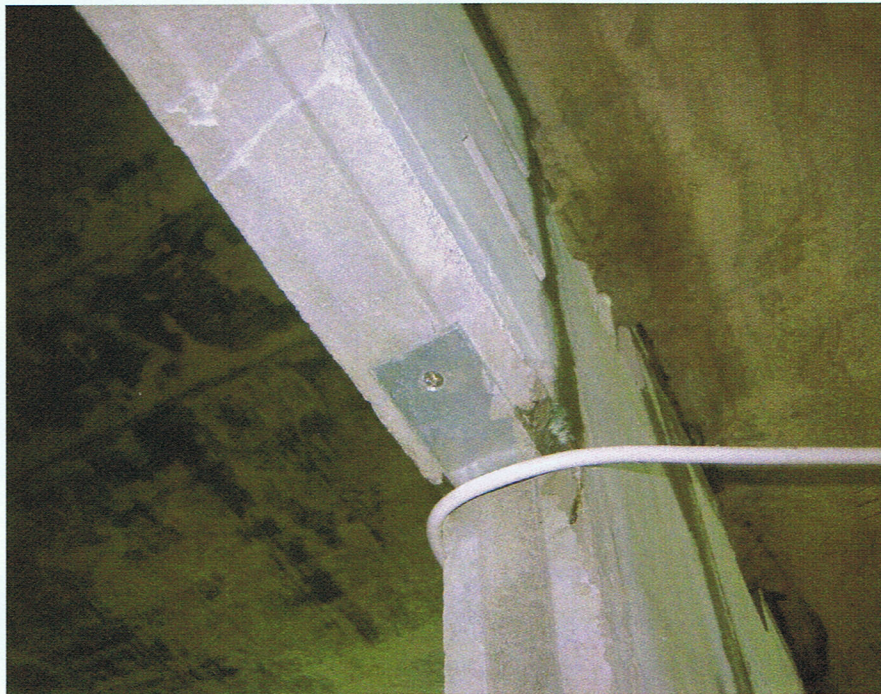
E.16

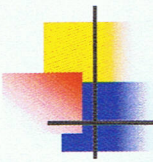
Additional Ceiling Anchor






E.17 Fixing of Door Crossing Panel





E.18 Completed Installation



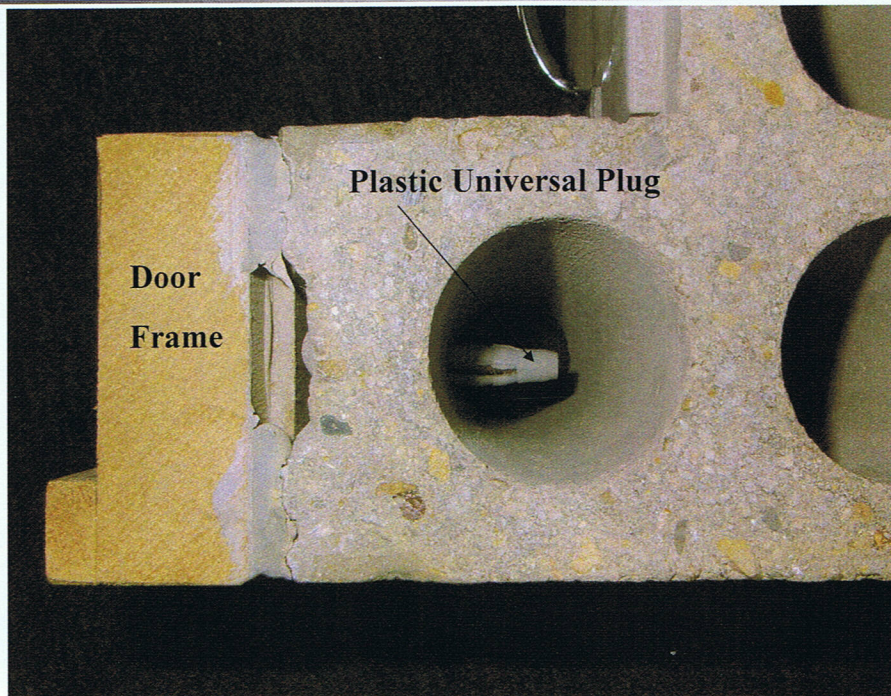


E.19

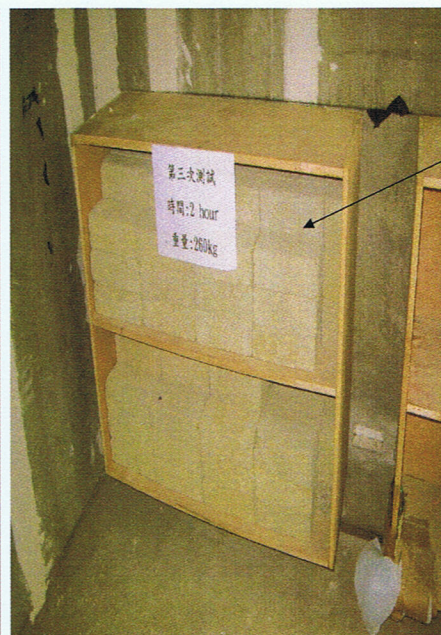
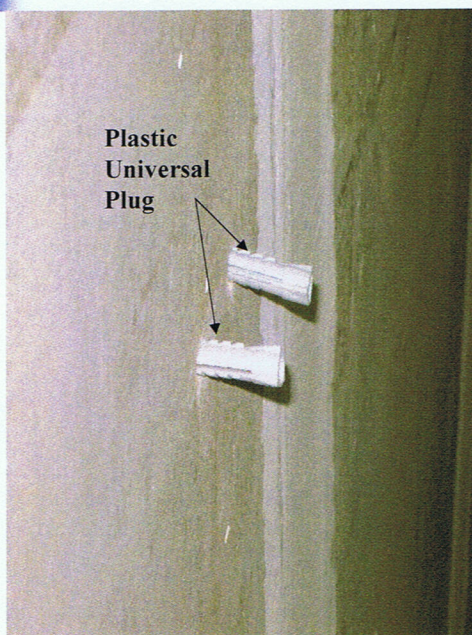
Fixing of Joint Tape



E.20 Fixing of Door Frame



E.21 Cupboard Installation by Plastic Universal Plug on Buildmates Wall



E.22 Kitchen Cabinet Secured on Buildmates Wall

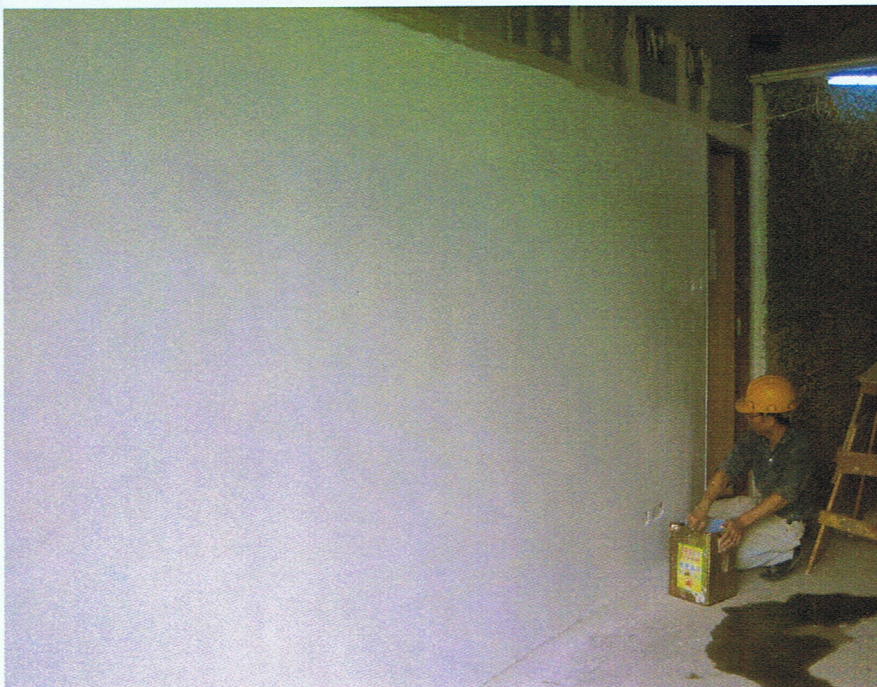


E.23 Tiles Laying & Basin Hanging on Buildmates Wall





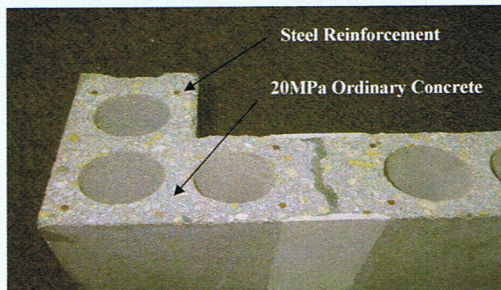
E.24 Painting on Buildmates Wall



F. Technical Features and Advantages

F.1 Technical Features 1 and Advantages

1. Panels made from 20 MPa concrete and steel reinforcement

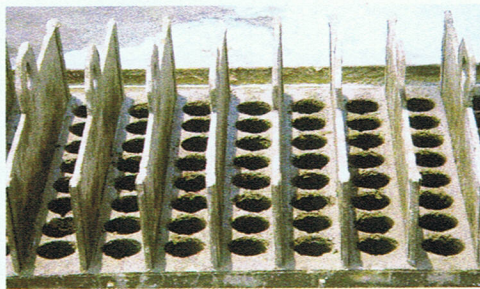


- * Excellent sound insulation
(43 dB for 85mm thick wall, BS 5821:1984)
- * Excellent water-repellent (ASTM C97-96)
(Water absorption rate less than 8%)
- * Excellent hanging capacity
(400 kg/m, BS 5234:Part 2)
- * Excellent ageing properties



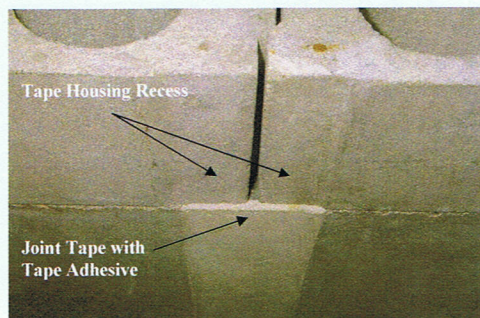
F.2 Technical Features 2 & 3 and Advantages

2. Panels cast with vertical steel mould



- * Hard and smooth self-finish
- * Even surface

3. panels with tape housing recess



- * Tape housing recess
- * No plaster required, cost saving, fast speed on works progress



F.3 Technical Features 4 & 5 and Advantages

4. Custom-made size



- * Simple and one-off erection
- * Less cutting debris on-site, tidy site

5. Pre-installed conduits and switch boxes in panels



- * Concealment of conduits
- * Minimal site work, less labour on-site

F.4 Technical Features 6 – 9 and Advantages

6. Panels made from ordinary steel reinforced concrete

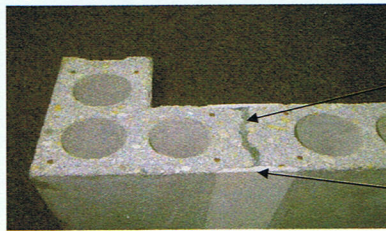
* Similar materials as R.C. framing

7. Non-shrink mortar infilling joints

* Balance of mortar shrinkage at joint

8. Super 3 (3 layers) reinforcing joint tape

* 3 times of reinforcing force at joint



Non-shrink
mortar

3 layers reinforcing
joint tape

9. Return panels



* Free of cracks at joints

F.5 Technical Features 10 and Advantages

10. 85mm Buildmates wall replacing 150mm brick wall with plasters on the both surfaces

Buildmates Wall →



Bricks Wall →



- Door lintel
- Door sub-frame
- Bonding ties
- Plasters
- Concrete curbs
- Waste materials

- * Increase of usable floor area
- * Door sub-frame / Door lintel / Bonding ties / Angle bead / concrete curbs/ Steel mesh eliminated
- * No plaster required
- * No scraping off waste mortar on floors
- * Environmental friendly

G. Brief Summarization for Buildmates Wall



- * High standard and high quality
- * 20 MPa reinforced concrete, 400 kg/m hanging capacity
- * 3 layers reinforcing joint tape, free of cracks at joints
- * Vertical mould cast, even surfaces, no plaster required, environmental friendly
- * Custom-made size, pre-installed conduits, tidy site
- * Detailed specification, drawings and testing report of manufacturing and installation, good and complete technical support
- * Over hundred big projects experience
- * System fully matured, including product design, manufacture, installation and accessories

(The End)