



工程指示 / 要求簡箋 ENGINEER INSTRUCTIONS(E.I.)

工程指示編號:	EI-7038	修改版本:	-
	HK-2714		
工程編號:	J 856	工程名稱:	天榮站
收件人:	生統/Maggie	發件人:	Iris
工程項目:	CW 補T1 地盤用隔熱棉BM表	日期:	23/11/2023

<input checked="" type="checkbox"/> 原合約工程包	<input type="checkbox"/> 原合約工程加 / 減賬 QT-	<input type="checkbox"/> 新工程報價 QT-
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信件批核號碼/圖紙參考編號:	批核模具圖紙編號:
客戶指示附件:	管理內部批簽署:

<input type="checkbox"/> 初步鋁料 B.M.	<input type="checkbox"/> 加工拆圖, 然後生產	<input type="checkbox"/> 尺寸表
<input type="checkbox"/> 正式鋁料 B.M.	<input type="checkbox"/> 技術上資料/指示	<input type="checkbox"/> 報價
<input type="checkbox"/> 配件 B.M.	<input type="checkbox"/> 樣辦或貨品說明書	<input type="checkbox"/> 分判合約
<input type="checkbox"/> 其他:		

內容:
CW 補T1 地盤用隔熱棉BM表

(可根據EI5322作參考)

完成上列要求日期: 07/12/2023

國內

<input type="checkbox"/> 生產技術總監	<input type="checkbox"/> 連附件	<input checked="" type="checkbox"/> 技術部	<input checked="" type="checkbox"/> 連附件	<input type="checkbox"/> 生產部	<input type="checkbox"/> 連附件
<input type="checkbox"/> 採購部	<input type="checkbox"/> 連附件	<input checked="" type="checkbox"/> 生產統籌部	<input checked="" type="checkbox"/> 連附件	<input type="checkbox"/> 報關組	<input type="checkbox"/> 連附件
<input type="checkbox"/> 質檢部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 會計部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 機械設計部	<input type="checkbox"/> 連附件
<input type="checkbox"/> 香港辦	<input type="checkbox"/> 連附件	<input type="checkbox"/> 其他:			

香港

<input type="checkbox"/> 行政部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 會計部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 統籌部	<input type="checkbox"/> 連附件	<input type="checkbox"/> 工程部	<input type="checkbox"/> 連附件
<input checked="" type="checkbox"/> 採購部	<input checked="" type="checkbox"/> 連附件	<input type="checkbox"/> QS部	<input type="checkbox"/> 連附件	<input checked="" type="checkbox"/> 地盤管理	<input checked="" type="checkbox"/> 連附件	<input type="checkbox"/> 維修部	<input type="checkbox"/> 連附件

*發件人簽署: Iris	*組別成員批核簽署:
傳遞編號:	項目經理簽署:

地盤用配件B.M.表

BM編號:

工程號:	J-856	計算:	李传鹏	日期:	2023/11/23	送呈:	KEN
地盤名稱:	天荣站	核對:	練松文	日期:	2023/11/23	副本:	
項目類別:	T1大货	批准:	林仁安	日期:	2023/11/23		
A/C Code:							

此BM依據17/10/2023單元幕牆施工圖第4版

序號	修改標示	配件圖號	物料編號	配件名稱	顏色	實用	後備	總數	單位	備注
1		ROCKWOOL <i>Rock Go</i> Curtain	plus 50mm thk x 110kg/立方	50厚隔熱棉 (1200x600x50mm)		275	14	289	件	用于背板/T1CW及SU层
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possible water infiltration and evacuating it to the building exterior. These gutters should employ a drained pressure-equalized cavity.

2. Unless otherwise specified, all gutters shall be made of grade 316 stainless steel with a minimum thickness of 1.5 mm or grade 3003/5005 aluminium with a minimum thickness of 3.0 mm and finished as noted on the Drawings. Construction joints shall be made up with sleeves of the same material and thickness, mechanically fixed to the under side of the gutter, on one side of the sleeve, with a lap joint filled with silicone sealant of 150 mm in length on each end. Gutters must be designed with sufficient fall to bring water to the drain point for evacuation. Gutters must be designed to hold its full volume of water in case of blockage of the drain point without structural failure or occurrence of water penetration. Penetrations, for any reason, of/to the gutter below the flood line shall not be acceptable.
3. All gutters shall be insulated with a minimum of 50 mm thick, 60 kg/m³, mineral wool insulation.

6.7.11 Insulation

1. Insulation, and ancillary materials, shall not contain volatile organic components. Insulation shall be inert, durable, rot and vermin proof, CFC and HCFC free, shall not support mould fungal or bacteria growth and provide the specified performance for the service life of the Building Façade. Due allowance shall be made for the reduced performance of insulation due to the effects of moisture and ageing.
2. Insulation shall be a mineral wool, CSR 110 kg/m³ Rockwool Fibertex-820, USG Thermafiber, or approved equal, having a 50 mm minimum thickness. Minimum U-value for insulation shall be 0.11 BTU/hr-ft²-F (0.68 W/m²-K). The insulation shall be butted tightly together, and taped with aluminium foil tape, at each joint and shall have an aluminium foil surface facing the interior side of the building. The insulation shall have a UL rated flame spread 0 without foil and a maximum flame spread of 25 with foil facing and a minimum nominal density of 60 kg/m³.
3. Thermal insulation shall be installed so as to prevent the formation of condensation within the spandrel cavity. The Sub-Contractor shall submit dew point calculations and diagrams to the Architect for endorsement.
4. The insulation shall be provided with retaining wires, impaling spikes or other suitable means to retain insulation in place.

6.7.12 Fire Stop Separation and Smoke Seal

1. The fire stop separation and continuous smoke seal, shall follow the requirements of the relevant Hong Kong Buildings Department and Fire Services Department, and comply with the requirements stipulated in Code of Practice for Fire Safety in Buildings 2011.
2. Fire stop insulation and continuous smoke seal, shall be installed continuously from all exterior cladding to beam, column, floor edge, jamb separations, and the like, to complete a perimeter enclosure, or isolation, of each floor and at the roof line to provide a fully sealed barrier from floor to floor between the face of the building structure and the exterior wall without interruption or discontinuity or openings.
3. The local design institute and/or Hong Kong Buildings Department and Fire Services Department shall approve construction details and fire resisting materials.
4. Acceptable evidence shall be submitted by the Sub-Contractor to prove its compliance with all requirements of local codes and local design institute's requirement. This shall be demonstrated by one or more of the following: design information, test certificates or testing.
5. Fire stop insulation material shall be CSR 60 kg/m³ Rockwool Fireseal Batt having a 135 mm minimum thickness from top to bottom, or USG Thermafiber Safing Insulation having a 102 mm minimum thickness from top

Tin Wing Stop - Project

寄件者: J1805-TinWingstop@alpha-c.com.hk
寄件日期: 2022年2月8日星期二 16:16
收件者: Tin Wing Stop - Project; 'LWK-Carmen Wong'; 'LWK-Bryant Kam'; 'LWK-Jason Ho'
副本: Robert Seng Hok Hung; Jonathan Chan Fuk Keung; Lai Chi Cheung; Petrina Cheung Long Ying; Lau Chi Kin; Kevin Lam Chun Yin; 'Arup-Michael Ku'; 'Arup-James Wong'; 'Arup-Project Email'; 'Arup-Kent Wong'; 'Arup-Jenny Leung'; 'Arup(RE)-Dixon Wong'; 'Arup-Tommy Ng'; 'Arup(RE)-W. K. Liu'; Dora Lee Chung Man; 'MTR-Dorothy Chan'; 'MTR-William Po'; 'MTR-Gary Chan'; 'MTR-Sam Lee'; 'MTR-Tony Chan'; 'MTR-Tommy Chan'; Cheng Shu Yan; TSWTL23 - PC; TSWTL23 - Site Engineer; TSWTL23 - M&E; 'Alpha-Dominic'; 'Alpha-Mr Lau'
主旨: RE: TSWTL23-MS-0605 Curtain Wall - Material Submission of Thermal Insulation and Fire Stop, Smoke Seal
附件: 20220208_MS-0605_AlphaComment.pdf

Dear All,

Attached please find our comments on the captioned submission.

Thank you.

Regards,

Candy Wai

Alpha Consulting Limited

Steel Structure & Facade Specialist

D +852 3975 3800

T +852 3975 3888 F +852 3975 3899

Unit 03-08, 12/F, Delta House, 3 On Yiu Street, Shatin, N.T., Hong Kong.

From: twsproject@shkp.com <twsproject@shkp.com>

Sent: Monday, January 24, 2022 1:57 PM

To: LWK-Carmen Wong <carmenwong@lwkp.com>; LWK-Bryant Kam (bryantkam@lwkp.com) <bryantkam@lwkp.com>; LWK-Jason Ho (jasoncsho@lwkp.com) <jasoncsho@lwkp.com>

Cc: robertseng@shkp.com; jonathanfkchan@shkp.com; laichicheung@shkp.com; lypcheung@shkp.com; cklau@shkp.com; kevinlam@shkp.com; Arup-Michael Ku (michael.ku@arup.com) <michael.ku@arup.com>; Arup-James Wong (james-tp.wong@arup.com) <james-tp.wong@arup.com>; Arup-Project Email (hkg.tws242744@arup.com) <hkg.tws242744@arup.com>; Arup-Kent Wong (kent.wong@arup.com) <kent.wong@arup.com>; 'Arup-Jenny Leung (jenny.leung@arup.com)' <jenny.leung@arup.com>; 'Arup(RE)-Dixon Wong (dixon.wong@arup.com)' <dixon.wong@arup.com>; 'Arup-Tommy Ng (tommy-cy.ng@arup.com)' <tommy-cy.ng@arup.com>; 'Arup(RE)-W. K. Liu (wai-kin.liu@arup.com)' <wai-kin.liu@arup.com>; cmdlee@shkp.com; MTR-Dorothy Chan (dwhchan@mtr.com.hk) <dwhchan@mtr.com.hk>; 'MTR-William Po (wkwpo@mtr.com.hk)' <wkwpo@mtr.com.hk>; 'MTR-Gary Chan (kaifu@mtr.com.hk)' <kaifu@mtr.com.hk>; 'MTR-Sam Lee (wflee@mtr.com.hk)' <wflee@mtr.com.hk>; 'MTR-Tony Chan (tcychan@mtr.com.hk)' <tcychan@mtr.com.hk>; MTR-Tommy Chan (tommycck@mtr.com.hk) <tommycck@mtr.com.hk>; sycheng@shkp.com; tswtl23pc@shkp.com; tswtl23se@shkp.com; tswtl23me@shkp.com; Alpha project email (J1805-TinWingstop@alpha-c.com.hk) <J1805-TinWingstop@alpha-c.com.hk>; Alpha-Dominic (dominic@alpha-c.com.hk) <dominic@alpha-c.com.hk>; Alpha-Mr Lau (zhlau@alpha-c.com.hk) <zhlau@alpha-c.com.hk>
Subject: TSWTL23-MS-0605 Curtain Wall - Material Submission of Thermal Insulation and Fire Stop, Smoke Seal

Dear all,

We are pleased to attach herewith the captioned document for reference and action.

Thank you for your kind attention.

Kammy Li
Yee Fai Construction Company Ltd.
Site Clerk for Tin Wing Stop
Tel: 3611 3518 Fax: 3614 5152



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YEE FAI CONSTRUCTION COMPANY LTD.
怡輝建築有限公司

MATERIAL SUBMISSION

RECEIVED

PROJECT : Property Development at LRT Tin Wing Stop at Tin Shui Wai on Lot No. TSWTL23

Document Ref.: TSWTL23/MS-0605

We submit herewith the following General Submission to **LWK & Partners (HK) Ltd.**

Sub-contractor:
Hacely Façade Engineering Limited

Attn: Ms. Carmen Wong / Mr. Bryant Kam / Mr. Jason Ho

Re-submission /
 Supplementary

for approval / information / Others, please specify : _____

SUBJECT: Curtain Wall - Material Submission of Thermal Insulation and Fire Stop, ~~Smoke Seal~~

DETAILS: The following material to be used in the above project is in accordance with / an alternative equivalent to the Specifications and Drawings, and are submitted for your review and approval.

Items	Details
(a) Material Description	Thermal Insulation, Fire-stop, Smoke Seal
(b) Location to be used	Curtain Wall System
(c) Drawing Ref.	-
(d) Brand Name	ROCKWOOL ✓
(e) Model	RockWool CurtainRock 80 Plus (Thermal Insulation) ✓ Rocksafe CSR FIRESEAL FS60 (Firestop) ✓
(f) Manufacturer	ROCKWOOL
(g) Source of Origin	China
(h) Supplier	ROCKWOOL

This submission is attached with the following:

- | | | |
|---|---|--|
| <input type="checkbox"/> Sample | <input checked="" type="checkbox"/> Test report / certificate | <input checked="" type="checkbox"/> Sample photo |
| <input checked="" type="checkbox"/> Catalogue | <input checked="" type="checkbox"/> Job Reference. | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Data/Specification | <input type="checkbox"/> Installation Drawing | <input type="checkbox"/> |

Remarks:

Your prompt reply before 8 February 2022 would be much appreciated. Thank you for your attention.

c.c. (By Email)		w/e	w/o	Authorized Representative
Best Vision Development Ltd	Mr. Robert Seng / Mr. Jonathan Chan / Mr. C. C. Lai / Ms. Petrina Cheung	<input checked="" type="checkbox"/>	<input type="checkbox"/>	 Ben Cheng (PM) (Name in Block Letter) 24 JAN 2022
Best Vision Development Ltd (RSM)	Mr. Dimon Ip	<input type="checkbox"/>	<input type="checkbox"/>	
Sun Hung Kai Architects and Engineers (ST)	Mr. C. K. Lau / Mr. Kevin Lam	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sun Hung Kai Architects and Engineers (ME)	Mr. K. L. Chan / Mr. Michael Chan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd	Mr. Michael Ku / Mr. James Wong	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd (RP)	Mr. Kent Wong / Ms. Jenny Leung	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd (RE)	Mr. Dixon Wong / Mr. Tommy Ng / Mr. W. K. Liu / Ms. Dora Lee	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
MTR Property	Ms. Dorothy Chan / Mr. William Po / Mr. Gary Chan / Mr. Sam Lee / Mr. Tony Chan / Mr. Tommy Chan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Alpha Consulting Ltd.	Mr. Dominic Yu / Mr. Z. H. Lau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site Office		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Submission Date

Prepared by:

REPLY BY LWKP / ARUP / SHKAE / ANONYMOUS / ALPHA / _____

REPLY Approved Approved with comments (A) Reviewed as Commented (Resubmission Required) (B)

See remarks comments

c.c.		w/e	w/o	Authorized Representative
Best Vision Development Ltd	Mr. Robert Seng / Mr. Jonathan Chan / Mr. C. C. Lai / Ms. Petrina Cheung	<input type="checkbox"/>	<input type="checkbox"/>	 Dr. Dominic Yu (Name in Block Letter) - 8 FEB 2022
Best Vision Development Ltd (RSM)	Mr. Dimon Ip	<input type="checkbox"/>	<input type="checkbox"/>	
Sun Hung Kai Architects and Engineers (ST)	Mr. C. K. Lau / Mr. Kevin Lam	<input type="checkbox"/>	<input type="checkbox"/>	
Sun Hung Kai Architects and Engineers (ME)	Mr. K. L. Chan / Mr. Michael Chan	<input type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd	Mr. Michael Ku / Mr. James Wong	<input type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd (RP)	Mr. Kent Wong / Ms. Jenny Leung	<input type="checkbox"/>	<input type="checkbox"/>	
Ove Arup & Partners Hong Kong Ltd (RE)	Mr. Dixon Wong / Mr. Tommy Ng / Mr. W. K. Liu / Ms. Dora Lee	<input type="checkbox"/>	<input type="checkbox"/>	
MTR Property	Ms. Dorothy Chan / Mr. William Po / Mr. Gary Chan / Mr. Sam Lee / Mr. Tony Chan / Mr. Tommy Chan	<input type="checkbox"/>	<input type="checkbox"/>	
Alpha Consulting Ltd.	Mr. Dominic Yu / Mr. Z. H. Lau	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Site Office		<input type="checkbox"/>	<input type="checkbox"/>	Reply Date

Also make hard copy to the following for their retention and information.

1. PD PM SA ASA SE PC ME QS Safety Officer Site Admin Others: _____

SYC/hyh

(* please cross the box and delete any as appropriate)

Curtain Wall Insulation



Fire Performance

ROCKWOOL® RockSafe has been subjected to fire resistance test/assessment in accordance with BS476 part 20 in accredited laboratory and achieve two hours fire rating meeting the integrity and insulation criteria. To achieve the above Fire Resistance Rating (FRR), the RockSafe of 135mm thickness is required to be compressed. The width of RockSafe after compression should be not more than 85% of its original width, which means RockSafe has to be compressed to at least 15% of its original width. Please refer to your local authority for applicable approval needed on this product.

Facings

Curtain wall standard products are available in plain. It can be faced with aluminum foil upon request.

Packaging and Storage

Products are shrink-wrapped in polyethylene sheets for ease of handling, transportation, storage and identification. Products should be stored indoors or under a waterproof covering.

Shall comply with Manufacturer recommendation

CREATE AND PROTECT®

Curtain Wall Insulation

Indicate in shop drawing and BD drawing

Benefits

- Highly durable insulation product
- Remarkable resistance to shrinkage at temperatures encountered in fire conditions
- Easily fits into standard party wall applications
- Easily cut and formed to fit into tight applications
- Excellent and cost effective insulation
- Performance is not adversely effected from contact with water
- Non combustible



Technical Parameters

Properties	Standards	RockSafe
Thickness	EN823	135mm
Length & Width	EN822	1200mm x 600mm
Density	EN826	60kg/m ³
Thermal conductivity at 20degC	ASTM C518	0.035W/mK
Fire Performance	ASTM E84 BS476 Part 20	Flame spread 0, Smoke develop 5 2 hours fire rating*
Water Absorption (partial immersion)	EN1609:97	Less than 0.5kg/m ²
Corrosion resistance	ALPHA4500H+B	Faintly alkaline with pH 7.5-9 and incapable of corroding steel
Water Vapor absorption	ASTM C1104/1104M	Absorb < 0.04%Vol
Odor emission	ASTM C665-06	No perceptible present
Fungi Resistance	ASTM 1338	Does not encourage growth of fungi

Firestop

* Please check with local authority for any local approval needed

Properties	Standards	CurtainRock 80 Plus	CurtainRock 80 Pro
Thickness	EN823	50mm, 60mm, 70mm, 75mm, 80mm, 100mm	
Length & Width	EN822	1200mm x 600mm	
Density	EN826	110kg/m ³	128kg/m ³
Thermal conductivity at 20degC	ASTM C518	0.035W/mK	
Noise reduction coefficient properties**	BSEN ISO354:03	Up to 1.0	
Fire Performance	ASTM E84	Flame Spread 0, Smoke develop 5	
Water Absorption (partial immersion)	EN1609:97	Less than 0.5kg/m ²	
Corrosion resistance	ALPHA4500H+B	Faintly alkaline with pH 7.5-9 and incapable of corroding steel	
Water Vapor absorption	ASTM C1104/1104M	Absorb < 0.04%Vol	
Odor emission	ASTM C665-06	No perceptible present	
Fungi Resistance	ASTM 1338	Does not encourage growth of fungi	

Insulation

**NRC calculated to ASTM C423 D1 can be achieved on 50mm thick product based other reference reports



CREATE AND PROTECT™

Rockwool Building Materials (Hong Kong) Ltd.

Hong Kong Sales Office

Unit 301-2, 3/F, Koon Wah Building, No. 2 Yuen Chun Circuit, Yuen Chau Kok, Sha Tin, N.T., Hong Kong
 T: (+852) 2754 0877
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Guangzhou Factory

3 Taihua St, Yonghe Dist of Guangzhou Econ & Tech Development Dist, Guangzhou, Guangdong Province, P.R.China (511356)

midi@midiltd.com.hk

From: "pmchow@shkp.com" <pmchow@shkp.com>
To: "j856@midiltd.com.hk" <j856@midiltd.com.hk>,
"tswtl23pc@shkp.com" <tswtl23pc@shkp.com>,
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"kcau@shkp.com" <kcau@shkp.com>, "hcyip@shkp.com" <hcyip@shkp.com>
Copies to: "jingo.midi@gmail.com" <jingo.midi@gmail.com>,
"johnny.cc.midi@gmail.com" <johnny.cc.midi@gmail.com>
Subject: RE: TSWTL23 - Material Submission of Fire Stop & Thermal Insulation
for Curtain Wall for Towers
Date sent: Tue, 23 May 2023 01:17:11 +0000

Dear Midi,

Please note RockSafe and CurtainRock 80 Plus have been approved as per MS-605 for firestop and insulation.

Regards,
Mandy

From: j856@midiltd.com.hk <j856@midiltd.com.hk>