科技工藝 持續精進



上鎧鋼鐵
SHANG KAI STEEL

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SHANG KAI STEEL

機械科技打造精湛工藝

"Building Craftsmanship Through Mechanical Technology."

自 1988 年，上鎧鋼鐵致力於提供卓越的金屬擴張網。我們符合國際標準化組織 ISO 9001：2015 品質管理系統標準，因為每一個環節都達到自我的嚴格標準。

如今，上鎧鋼鐵加倍重視服務與數據，為了提高整體競爭力，從 2017 年全面更新工廠自動化機器設備與工廠電腦化管理，自工業 2.0 邁向工業 4.0，與歐美技術並駕齊驅。透過跨國／跨界思維，積極開發高附加價值與高端差異性產品，不斷嘗試創新與研發，致力於帶給客戶絕佳體驗。

在每次密切的合作關係裡，我們的技術總能不斷突破，與之創新。現在，您可以發現上鎧鋼鐵的產品為全球信任，「信任」一直是上鎧鋼鐵的最重要的品牌價值。我們擁有豐富的經驗及完善的生產設備，致力於提供客戶高品質、高價值之產品，以高標準滿足客戶之需求！

Since 1988, Shang Kai Steel has been dedicated to providing superior Expanded Metal meshes. We conform to the ISO 9001:2015 Quality Management System standards set by the International Organization for Standardization because every stage of our production meets our own strict standards.

Nowadays, Shang Kai Steel places a greater emphasis on service and data in order to improve overall competitiveness. In 2017, we fully updated our factory's automation equipment and computerized management, moving from Industry 2.0 to Industry 4.0. Through cross-national and cross-industry thinking, we actively develop high-value-added and high-end differentiated products, constantly trying to innovate and research, committed to providing customers with an excellent experience.

In every cooperation relationship, our technology always continues to break through and innovate. Now, you can find Shang Kai Steel's products to be globally trusted. "Trust" has always been the most important brand value for us. At Shang Kai Steel, we use state-of-the-art machinery and technology to create products of exceptional craftsmanship. Our advanced equipment and skilled technicians allow us to consistently deliver high-quality products that meet the high standard of our customers!



公司簡介
Company Profile

上鎧鋼鐵股份有限公司是由**董事長林宗志先生**創立，專門從事金屬擴張網製造。公司經營理念是「誠信、品質」。我們擁有多種設備和技術，可製造板厚範圍從 0.05mm-8.0mm，不限於任何金屬材質。我們可生產各國標準擴張網，並持有 ISO 9001 品質管理系統，並有特訂品質保證制度。在台灣高端產品市場中占有率超過八成，並銷售至世界各地。

Shang Kai Steel Co., Ltd. was founded by Chairman Chung-Chih Lin and specializes in the manufacturing of expanded metal mesh. The company's business philosophy is "integrity and quality". We have a variety of equipment and technology, and can produce sheets with thicknesses ranging from 0.05mm-8.0mm, not limited to any metal material. We can produce various national standard expanded metal meshes and have an ISO 9001 quality management system and a special quality assurance system. We have a market share of more than 80% in Taiwan's high-end product market and sell our expanded metal mesh products to customers worldwide.

上鎧鋼鐵在 1998 年開始轉型，從 OEM 和 ODM 代工轉為 OBM，以滿足客戶日益變化的需求。近年來，公司重視服務和數據分析，積極推動工廠自動化和電腦化管理，從工業 2.0 轉型為工業 4.0，開發出具有高附加價值和高端差異性的產品。我們致力為客戶提供優質的產品與服務，幫助客戶在國際市場上取得佳績。

In 1998, Shang Kai Steel began its transformation journey, shifting from OEM and ODM contract manufacturing to OBM, to better meet the changing needs of its customers. In recent years, the company has placed a strong emphasis on service and data analysis, actively promoting factory automation and computerized management, and transitioning from Industry 2.0 to Industry 4.0. The company has developed products with high added value and high-end differentiation. We are dedicated to providing our customers with high-quality products and services, helping them achieve success in the international market.

經過三十多年的發展，上鎧鋼鐵的目標是「站穩台灣，深耕亞洲，放眼全球！成為高端客戶唯一指定的金屬擴張網供應商」。作為台灣產業用金屬擴張網的領導廠商，上鎧展現出卓越的技術水準，在金屬網產業鏈中扮演著重要的角色。我們將繼續追求「共好、共創、永續」，朝向更高水準的企業發展目標邁進。

After more than 30 years, Shang Kai Steel has established itself as a leading supplier of metal mesh in Taiwan, Asia and the world. The company aims to be the "Top choice for high-end customers as a supplier of Expanded metal mesh". As a leader in Taiwan's metal mesh industry, Shang Kai Steel has demonstrated its expertise and commitment to excellence. The company will continue to pursue its goal of "mutual benefit, co-creation and sustainability" and strive for even greater success in the future.



LRQA

Current issue date: 28 November 2022
Expiry date: 28 November 2025
Certificate identity number: 10464760

Original approval(s): ISO 9001 - 28 November 2022

Certificate of Approval

This is to certify that the Management System of:

SHANG KAI STEEL CO., LTD.

No. 16 Juguang 2nd St. Daliao Dist., Kaohsiung City 831136, Taiwan

has been approved by LRQA to the following standards:

ISO 9001:2015

Approval number(s): ISO 9001 – 00038541

The scope of this approval is applicable to:

Manufacturing and sale of expanded metal and metal lath.

Luis Cunha

Area Operations Manager - North Asia & SAMEA

Issued by: LRQA Limited

IAF SKAS

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Issued by: LRQA Limited, 1 Trinity Park, Bickenhill Lane, Birmingham B37 7ES, United Kingdom

Page 1 of 1



Certificate

Standard: **ISO 14064-1:2018**

Certificate Registr. No: **CF 50943434 0001**

Report No: **38540393 001**

Certificate Holder: **Shang Kai Co., Ltd.**
No.16, Chu-Kuang 2nd Street, Ta-Fa Industrial District, Ta-Liao Dist., Kaohsiung City, Taiwan (R.O.C.)

Site: **Shang Kai Co., Ltd. Headquarters**
No.16, Chu-Kuang 2nd Street, Ta-Fa Industrial District, Ta-Liao Dist., Kaohsiung City, Taiwan (R.O.C.)

Scope:
Verification and Validation Body: TÜV Rheinland Taiwan Ltd.
- Process: Document review, interview, site visit and recalculation
Based on the information we have received and evaluated that:
- Programme: Voluntary
- Review Criteria: ISO 14064-3:2006
- Organizational Boundary: Operational Control
- Level of Assurance: Reasonable
- Materiality: 5%
- Global warming potential (GWP): IPCC 2013
- Base year: 2021 (2021.01.01~2021.12.31)
- Inventory year: 2021 (2021.01.01~2021.12.31)
- The total carbon emission is 447.399 tons of carbon dioxide equivalent (tCO_2e)
  - Direct emission is 65.3248 tCO_2e
  - Indirect emission is 381.9673 tCO_2e
- 2021 electricity emissions factor not publish, the inventory use 2020 electricity emissions factor for GHGs calculation

Validity: This certificate only reviewed the emissions data of inventory year, this certificate is not for the management systems certification.

2022-05-24

TÜV Rheinland Taiwan Ltd.

www.tuv.com

IAF TAF

TÜVRheinland®
Precisely Right.



LCBA Low Carbon Construction

LCBA低碳工法標章證書

Low Carbon Footprint Building Construction Certificate of Accreditation

證書編號Certificate No: LCBA-LCC-015

申請廠商｜上鎧鋼鐵股份有限公司
工法名稱｜金屬擴張網外遮陽系統系列
申請人｜林宗志

碳減量效益之減碳比率	SKA 20-33：5.4% SKA 30-59：6.0% SKA 20-28：5.2% SKA 20-55：8.8% SKA 20-143金屬擴張網：6.1% SKA 20-59：6.9% SKA 15-06：5.3%

The following construction(s) was/were submitted and identified on behalf of the client as:

Shang Kai Steel Co., Ltd

Construction Name	Expanded metal SK-Architecture Type
Carbon Reduction	SKA 20-33：5.4% SKA 30-59：6.0% SKA 20-28：5.2% SKA 20-55：8.8% SKA 20-143：6.1% SKA 20-59：6.9% SKA 15-06：5.3%

低碳建築聯盟
Low Carbon Building Alliance
蔡福賢
Certified on 2022.05.27

LCBA



台灣精品獎
Taiwan Excellence Award 2023

特頒予
Presented to

上鎧鋼鐵股份有限公司
SHANG KAI STEEL CO., LTD.

具高耐風性能之建築用遮陽節能金屬擴張網
Sunshade Energy-Saving Expanded Metal Mesh for Building with High Wind Resistance
SKA Series

王美花

經濟部 部長
Minister, Ministry of Economic Affairs, R.O.C.
中華民國111年11月23日
23rd of November 2022



經濟部

潛力中堅企業
證書

上鎧鋼鐵股份有限公司
持續專注本業，在特定領域表現傑出，具有發展為卓越中堅企業之潛力，經評選後，榮獲第5屆潛力中堅企業，特頒此證，以茲證明。

部長 沈榮津

中華民國 108 年 10 月

Certificate of Potential Taiwan Mittelstand Award

This certificate of the 5th Potential Taiwan Mittelstand Award is presented to SHANG KAI STEEL Co., Ltd. in recognition of its outstanding performance in a specific field and for its strong potential to become a Taiwan Mittelstand Award winner.

Jong-Chin Shen
Minister of Economic Affairs, R.O.C.
October 2019



NATIONAL AWARD OF OUTSTANDING SMALL AND MEDIUM ENTERPRISES

國家磐石獎證書

上鎧鋼鐵股份有限公司

參加第26屆國家磐石獎－卓越中小企業選拔，經評審委員會評審結果，榮獲國家磐石獎，特頒此證。

經濟部部長 沈榮津

中華民國全國中小企業總會理事長

THIS IS TO CERTIFY THAT

SHANG KAI STEEL CO., LTD.

IS THE WINNER OF THE
26th NATIONAL AWARD OF OUTSTANDING
SMALL AND MEDIUM ENTERPRISES

Jong-Chin Shen
MINISTER
MINISTRY OF
ECONOMIC AFFAIRS, R.O.C.

CHAIRMAN
NATIONAL ASSOCIATION
OF SMALL & MEDIUM
ENTERPRISES, R.O.C.

中華民國 106 年 10 月 31 日



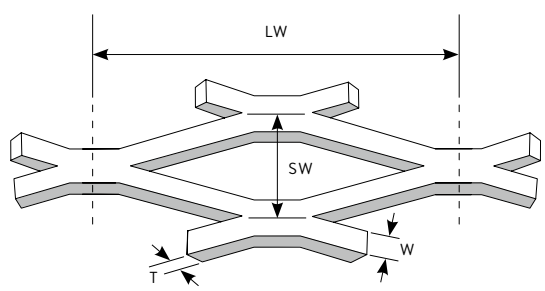


金屬擴張網

Expanded Metal

金屬擴張網是將金屬板材經由橫切和拉伸擴展，所形成規則相同的菱形網狀結構，使其具有較高的抗拉強度。由於可生產不同的金屬材質及材料耐候性高、表面處理多樣化、成品網面平整、孔徑均勻等特點，上鎧鋼鐵的擴張網能夠在各個產業中更被廣泛地使用。而現在我們對擴張網有了全新的定義，即『穩固安全』、『過濾通透』、『綠化節能』和『變化彈性』。和以往所不同的是，我們對於原料、製作環節和細節上的執著與追求，上鎧鋼鐵所生產的擴張網具有豐富的立體視覺效果，可以塑造出穿透性的美感，提升各產業產品的質感和價值，使金屬擴張網成為越來越多產業的選擇。

Expanded metal is a type of metal mesh that is made by cutting and stretching metal plates to form a regular pattern of holes. Its diamond-shaped structure gives it high tensile strength. Because of the weather resistance of different metal materials, the surface treatment is diverse, the net surface is smooth, the aperture is uniform and other characteristics, the Shang Kai Steel expanded metal can be more widely used in various industries. Nowadays, we have a new understanding of expanded metal, that is "stable and safe," "filter and transparent," "green and energy-saving," and "changeable and elastic." Different from the past, We are persistent in the material, production process, and details, and the Shang Kai Steel expanded metal has a rich three-dimensional visual effect, can shape the permeable beauty, enhance the quality of various industrial products, and make the expanded metal a more and more popular choice in various industries.



本公司亦可製造上述標準以外的產品，如有需要，請與我們聯繫。
Our company is also capable of manufacturing products beyond the mentioned specifications. If needed, please feel free to contact us.







擴張網介紹

- SW: 菱形短邊尺寸中心之間的距離。
- LW: 菱形長邊尺寸中心之間的距離。
- LWM: 寬度 (對應菱形長邊方向)。
- SWM: 長度 (對應菱形短邊方向)。
- 厚度 : 原料厚度。
- 總高度 : 網格總高度通常是材料厚度測量值的 1-2.5 倍。
- 網條 : 是菱形邊長之寬度。
- 所有厚度、網條重量均存在 +/-10% 的公差。
- 標準尺寸 : 915 x 1830 (LWM x SWM)、
  1220 x 2440(LWM x SWM)、
  1525 x 3050 (LWMXSWM)。

材料

鋼鐵、不銹鋼、鋁、鍍鋅鋼板、電氣鍍鋅鋼板、銅、鈦、鎳、銀、金。

表面處理

熱浸鍍鋅、粉體塗裝、陽極處理、氟碳烤漆。

Expanded Metal Technical Specifications

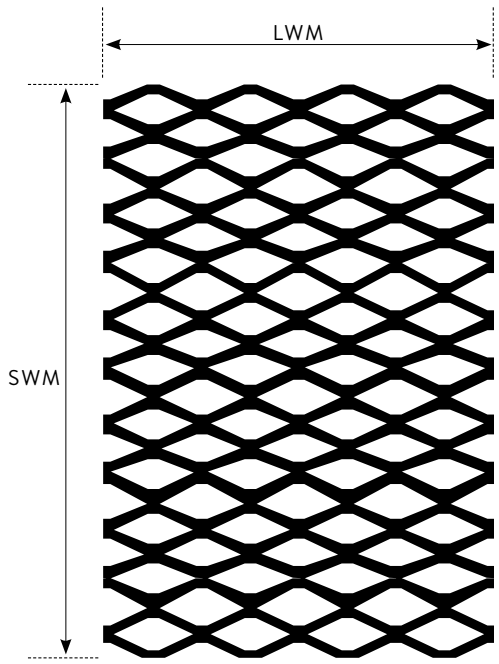
- SW: Short way Dimension of mesh.
  (Distance between centers in direction of short mesh)
- LW: Long way Dimension of mesh.
  (Distance between centers in direction of long mesh)
- LWM: Length (Long Way direction of the diamond)
- SWM: Width (Short direction of the diamond)
- Thickness: Material Thickness.
- Overall Thickness: The Overall Thickness can be as much as 1-2.5x the measurement of material thickens.
- Strand/Width: The width of diamond shape on each slice.
- All thickness, strand width and weight are subject to +/-10% tolerance.
- Standard sheet is 915 x 1830 (LWM x SWM)、
  1220 x 2440 (LWM x SWM)、
  1525 x 3050 (LWMXSWM).

Material

Mild steel、Stainless steel、Aluminium、Pre-galvanized steel、Electrical Galvanized Steel、Copper、Titanium、Nickel、Silver、Gold

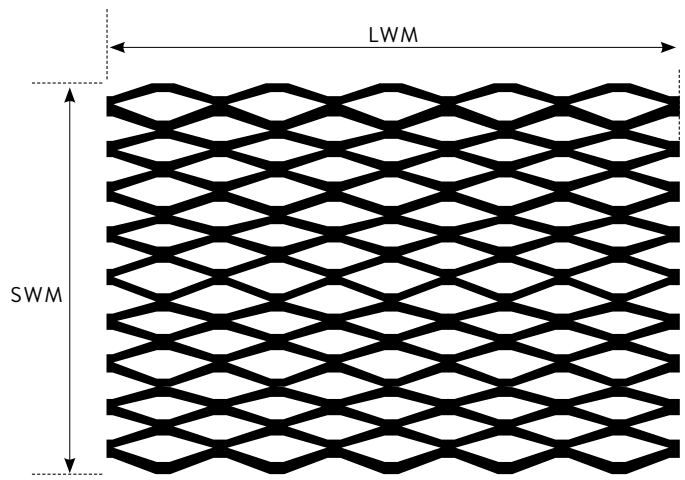
Surface treatment

Hot-dip Galvanizing、Powder coating、Anodizing treatment、Fluorocarbon coating



X 型式 /X Type

標準尺寸 Standard sheet
915 x 1830 (LWM x SWM)
1220 x 2440 (LWM x SWM)
1525 x 3050 (LWMXSWM)



Y 型式 /Y Type

標準尺寸 Standard sheet
2440 x 1220 (LWM x SWM)
3050 x 1525 (LWM x SWM)

SKRL

金屬有筋網

Ribbed Lath

金屬有筋網採用國際標準鍍鋅鋼板，經由自動化機器沖輾壓成形箭尾形狀。此模板輕巧堅韌，可用於防火、隔熱施工時的底層材料，具有補強效果，或黏附於表面上，使灰泥更完整地凝結附著於其表面上。其肋條可垂直或水平安置，形狀和尺寸變化多端，廣泛應用於建築和土木工程，操作簡單、施工快速、回報高、環保節能。

Ribbed Lath is made of pre-galvanized steel that is expanded into a herringbone pattern. This lightweight yet durable product is used for fireproofing and structural reinforcement, as well as a surface for materials to adhere to. Its anti-corrosion properties allow for smooth application of coatings such as plaster. The product's ribbed design can be arranged in a variety of shapes and sizes to fit different construction needs. Ribbed Lath is highly adaptable, eco-friendly, time-and-cost-efficient, making it an excellent choice for construction projects.





金屬有筋網

RIbbed Lath

製品規格表 **Product Specifications**

產品編號 Product Ref.	材料厚度 Material Thickness	重量 Weight kg/m²	標準尺寸 Standard sheet size	最大跨距 Max. span
SKRL 361	0.3	1.04	2200 x 610	500
SKRL 461	0.4	1.4	2200 x 610	600
SKRL 561	0.5	2.0	2500 x 610	700

尺寸單位 – 公釐 Units in mm

長度除上述述規格外，可以配合顧客需要之尺寸製造，歡迎洽詢。

We can also manufacture products other than the above specifications, please contact us for details.

有筋網施工方法

CONSTRUCTION METHOD FOR RIBBED LATH

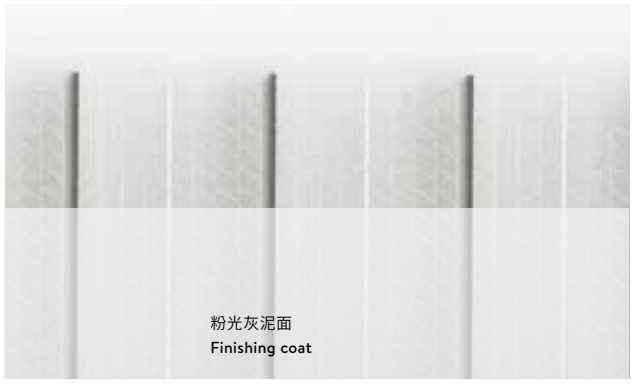
使用方法

固定有筋網的方法非常簡單，首先將肋條的頂端垂直貼齊支柱，然後使用鍍鋅鐵釘或鉤釘將肋條釘穿，以固定在木材支柱上，或者將鍍鋅鐵線環繞肋條緊密捆扎在鋼梁上（請參閱圖三）。有肋格網必須在兩端尾部重疊搭接，其邊上肋條也必須搭接，每隔 150 毫米使用 SWG # 18 (1.22 毫米徑) 鍍鋅鐵線進行紮綁（請參閱圖四）。如果在支撐柱上搭接，其重疊搭接面不得少於 50 毫米，并使用 SWG # 16 (1.63 毫米徑) 鍍鋅鐵線將肋條綁緊（請參閱圖五）。如果搭接點位於兩個支撐柱之間，其重疊搭接面必須達到 100 毫米以上，按照上述方式綁緊肋條，但每對重疊搭接點的肋條至少須綁緊兩點（請參閱圖六）。

PLACEMENT OF RIBBED LATH

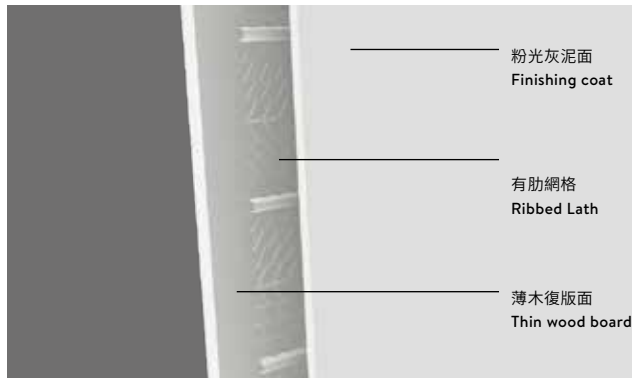
Fixing ribbed lath is a simple process. The ribs should always run vertically and be supported by fixing the apex of the rib to the support and securing every rib. When fixing against timber studs, use galvanized nails or staples through the rib. For steel studs, tie galvanized mild steel wire around the rib to secure it (see Fig. 3). The ribbed-lath should be overlapped at both edges, and the lapped edge ribs should be nested and wired together with #16 (1.22mm) galvanized wire at intervals exceeding 150mm (see Fig. 4). When overlapping on supports, the ribbed-lath should be overlapped no less than 50mm, and the ribs wired together with #16 (1.63mm) galvanized wire (see Fig. 5). When end laps occur between supports, the ribbed-lath should be overlapped no less than 100mm, and the ribs wired together with 1.63mm galvanized wire with at least two ties to each pair of overlapping ribs (see Fig. 6).

(圖一) Fig.1



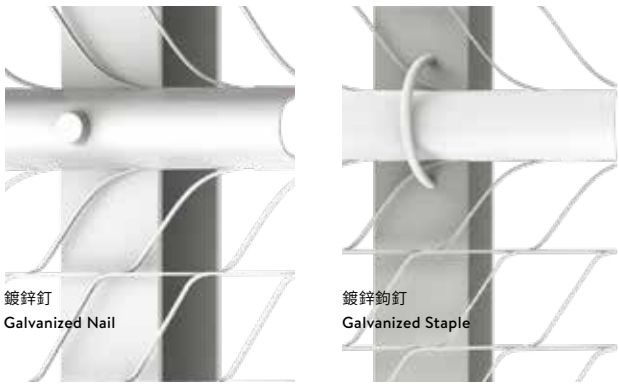
石膏板與金屬有筋網黏著表面
Bonding condition of plaster and Ribbed Lath

(圖二) Fig.2



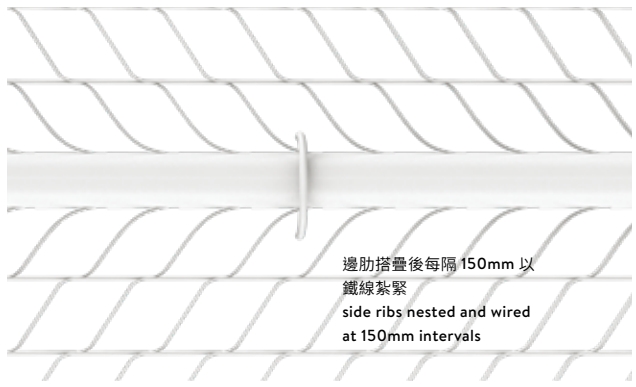
擋土牆構築應用
Retaining wall scons truction application

(圖三) Fig.3



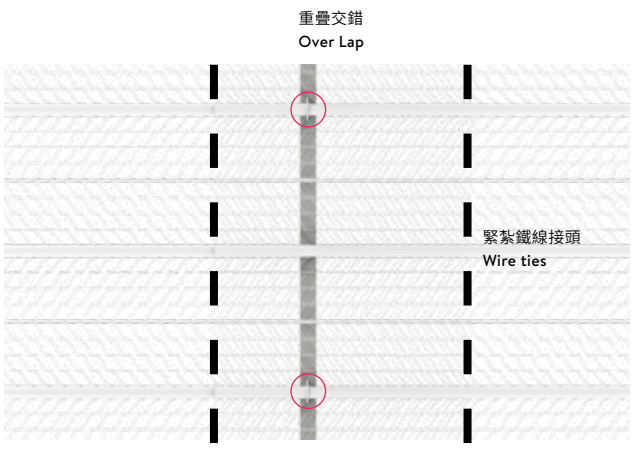
有筋網固定方法
Ribbed Lath fixing method

(圖四) Fig.4



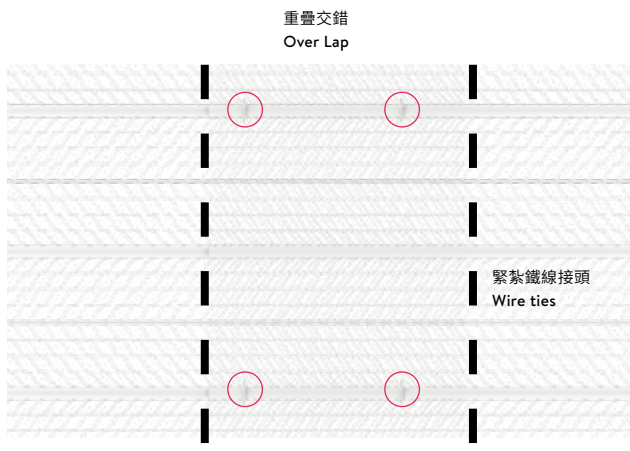
邊肋搭疊後情形
The edge ribs to lapped state

(圖五) Fig.5



在支撐柱處重疊情形
50mm(2") lap under support State

(圖六) Fig.6



在兩支撐柱間重疊情形
100mm(4") lap between support State

金屬免拆模板

High Ribbed Formwork

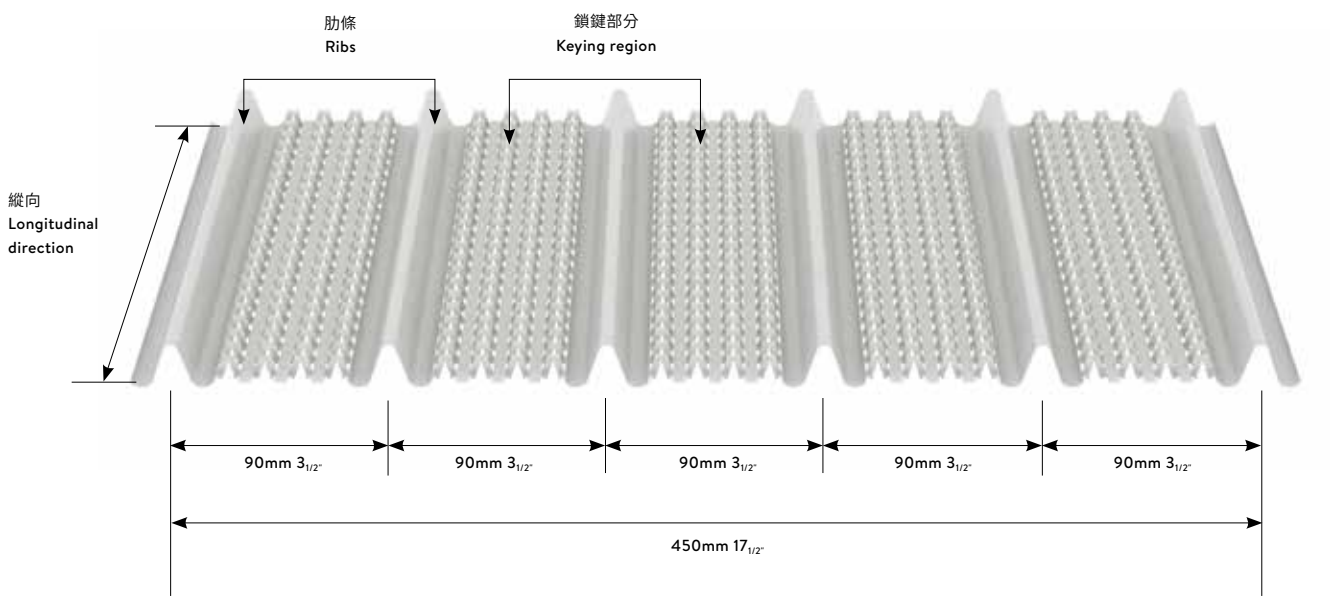
金屬免拆模板採用國際標準規範的鍍鋅鋼板製成，經由自動化機器沖輾壓成形。此模板輕巧且容易剪切彎折，可被用作臨時性結構，取代傳統的木質模板，並承受建築模板自重及外部荷載。在不同的環境下，其肋條縱向可呈垂直或水平方式安置，形狀和尺寸多樣。此外，邊肋上具有彎邊，彎邊與面板構成槽形，方便灌注混凝土，提高工程質量和施工安全性，同時能夠加快施工進度和降低成本。

Shang Kai Steel's High Ribbed Formwork is an excellent solution for construction projects. Made from pre-galvanized metal, it is lightweight, flexible, and easy-to-install, preventing rusting. The unique structure of the formwork allows it to be folded and shaped to adapt to different environments. The ribs can be arranged vertically or horizontally with various shapes and sizes. The formwork can easily replace traditional wooden formwork and support the weight of the building and external loads. Additionally, the edges have bent portions that form grooves with the panels, making it convenient for pouring concrete and enhancing the quality and safety of the construction project. The High Ribbed Formwork is more time and cost-efficient than traditional methods, such as wooden formwork, and can accelerate the construction progress while reducing costs. Overall, this product is an excellent choice for buildings, tunnels, and other constructions.

金屬免拆模板
High Ribbed Formwork

製品規格表 **Product Specifications**

產品編號 Product Ref	其他稱呼 Generic	材料厚度 Material thickness	重量 Weight kg/m²	標準製品尺寸 Standard sheet size
SKRF28	HR2811	0.3	2.58	2200 X 450
SKRF26	HR2611	0.4	3.44	2200 X 450
SKRF24	HR2411	0.750	6.47	2500 / 5000 X 450



尺寸單位 – 公釐 Units in mm

材料為鍍鋅鋼板。
Made by Pre-galvanized sheet material.

本公司亦可製造上述標準以外的產品，如有需要，請與我們聯繫。
Our company is also capable of manufacturing products beyond the mentioned specifications.
If needed, please feel free to contact us.

灌漿深度 Concrete Depth (M)	支撐間距 Distance Between Supports	
	SKRF 26	SKRF 28
3.00	0.25	0.22
2.50	0.30	0.27
2.00	0.40	0.35
1.50	0.60	0.50
1.00	0.70	0.60
0.50	0.85	0.70
0.25	1.00	0.80



金屬免拆模板施工方法

CONSTRUCTION METHOD FOR High Ribbed Formwork

產品說明

上鎧金屬免拆模板僅單面有肋條，其「反肋條面」一般用來固定於支撐上。支撐柱之間距與數量應按實際情況與經驗仔細決定（請參閱圖二、三、四、五、六、七、八）。

此產品能被彎折成為任何形狀結構，如遇角位，可切割產品之肋條及彎折至理想形狀。當產品應用於一般接縫結構上，其支撐間距與每次灌漿的深度之間的關係十分重要，灌漿深度與支撐間距的配合，請參考下列資料表。

PRODUCTS DESCRIPTION

The High Ribbed Formwork only has ribs on one side, with the support usually placed on the non-rib side. The number and positioning of supports are determined based on actual situations and experience (see Figures 2-8). This product can be bent and curved to accommodate toggle joints, and for angles, the ribs can be partially cut and then bent at the cutting. When used in construction joint applications, the relationship between support distances and pouring depth is critical. The table below provides recommendations for engineers to reference.

金屬免拆模板優良特性

- **質量輕**
  上鎧金屬免拆模板之標準重量為 3.39 kg/m^2 至 6.34 kg/m^2。

- **容易剪裁**
  普通剪刀即可輕易剪其「鎖鏈部分」， 而肋條位置則可使用挾剪剪切 (參照圖一) 。

- **貫穿結構**
  上鎧金屬免拆模板能縱向捲起、摺疊以貫穿最小直徑 150mm 之孔型建築結構，此能解決舊式模板無法安置於某些建築設計上的難題。

- **「鎖鏈」效果**
  上鎧金屬免拆模板之「鎖鏈部分」為精心設計之開放式網孔，可於灌漿時迅速排除適度水分與所有空氣。當灌漿完成凝固後，自然產生小結塊粗粒表面，即可進行下一次灌漿。

- **容易組合**
  上鎧金屬免拆模板之肋條安置可採用垂直或水平方式搭接成實際所需之面積。

FEATURES OF FORMWORK

- **Light Weight**
  The weight of each Formwork ranges from 3.39 kg/m^2 to 6.34 kg/m^2 , easy for installation of concrete joints.

- **Easy Cutting**
  A pair of tailor's scissors is strong enough to cut through the "keying region". At the ribs, one can use a plier type cutter to do the job (See Fig.1).

- **Going through holes**
  The Formwork can be rolled up longitudinally into a tube form to slip through holes of 150mm diameter. Our product can be placed in some inaccessible by conventional formworks areas.

- **Keying Effect**
  The "keying regions" between the ribs enable the cement to go through it from one side, letting the air and excess water to escape. When the concrete is set, the other side is left with a rough surface ready to receive adjacent concrete pouring.

- **The formwork can build up to a large area easily by over** lapping ribs or crossing the standard width of the product at the ends.

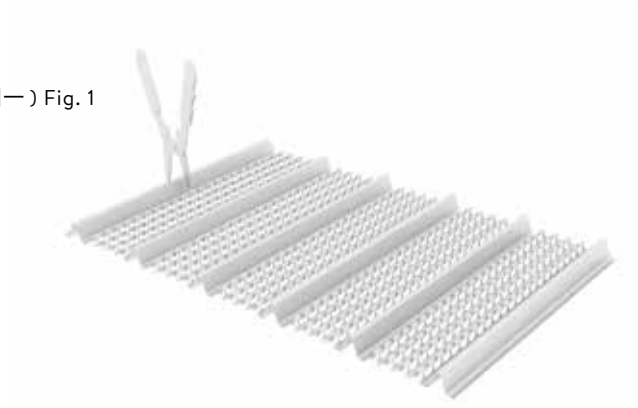
技術性優點

- 使用上鎧金屬免拆模板於接合組裝等位置 , 當灌漿完成凝固後 , 表面不易產生裂縫。
- 上鎧金屬免拆模板的開放式網孔可以視察、監控灌漿情況 , 亦可排除灌漿時所鎖住之空氣與多餘水分 , 其通風特性更可令混凝土迅速凝固。
- 上鎧金屬免拆模板的「反肋條面」可直接修飾表面及鋪磁磚。
- 上鎧金屬免拆模板底部混凝土的壓力比傳統模板更小。

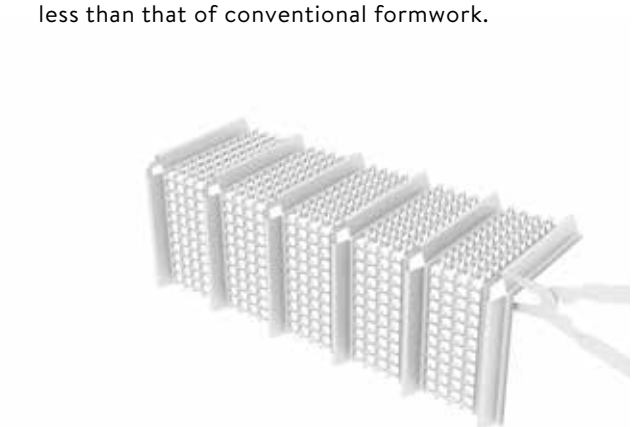
TECHNICAL ADVANTAGES

- With the application of the formwork, the surface is not easy to crack after the pouring of concrete.
- During the pouring of concrete, the openness of the formwork at the "Keying region" allows for monitoring the concrete levels. Meanwhile, the ribs allow for escape of trapped air and draining off excess water. Aeration at the formwork helps to set concrete quickly.
- The non-rib side of the formwork is always ready to receive plastering and / or tilling, wherever is required.
- Concrete pressure at the base of the formwork is always less than that of conventional formwork.

(圖一) Fig. 1

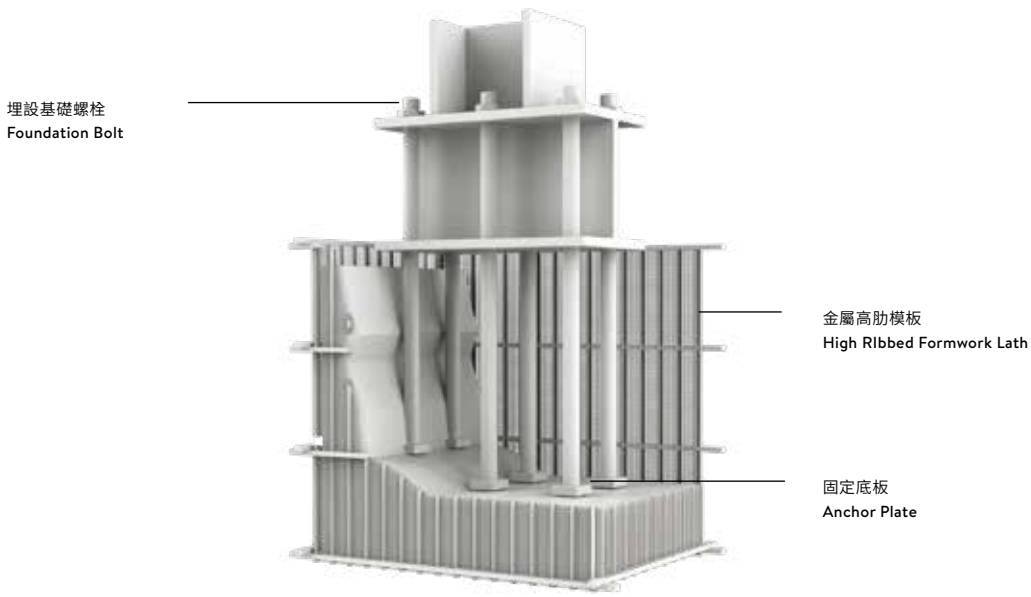


金屬高肋模板之助用剪刀即易沿所需尺寸剪裁
Ribs of h igh-ribbed formwork snipped a long line of required cut .



用手剪刀即易將金屬高肋模板予以剪切並彎曲
High-ribbed formwork sheet bent over and cut withh and shears.

(圖二) Fig. 2



上鎧金屬高肋模板築城之基礎柱盒剖面詳細
San Kai Fondation Bolt Box Section Detail.

混凝土選擇

上鎧金屬高肋模板適用於多數混拌混凝土。其坍落度 (Slumps) 最好保持在 70mm 至 150mm 級。如使用於坍落度 125mm 級以上 , 首次灌漿時可能造成些許水泥漿由模板網孔流失 , 但此現象並不會影響或減少混凝土之強度。而使用於坍落度 125mm 級以上 , 震動器並不適用。

CONCRETE SUITABILITY

The FORMWORK can be applied in most concrete mixes with slump between 70mm to 150mm. When the application is with concrete slump of 125mm and over, a little cementation liquid is expected to seep through the “Keying region” of the FORMWORK during the initial stage of the concrete pouring. However, it does not weaken the strength of the concrete core. In this situation, a vibrator is not applicable.

震動器使用

當需要使用震動器協助施工時 , 震動器與上鎧金屬高肋模板面必須保持最少 450mm 之距離。如果必須靠近 , 震動器最好每 5 秒至 10 秒震動一次 , 至混凝土在模板背面產生小結塊為止。

USE OF VIBRATOR

The placement of vibrator shall be at least 450mm away from the FORMWORK. If a shorter distance must be applied, the vibration must burst in every 5 to 10 seconds.

混凝土水泥漿灌注

混凝土不應直接灌注於高肋模板上。當灌注混凝土水泥漿時 , 必須從 距離模板最少 0. 5m 處灌注 , 其流至模板表面。一般情況下 , 混凝土水泥漿應灌注於模板之肋條面。

POURING OF CONCRETE

Concrete shall not be poured directly against the FORMWORK. The concrete shall be poured at about 0.5m away from the FORMWORK to let it flow towards the FORMWORK. In general, the pouring of concrete should be effected against the ribbed side of the FORMWORK.

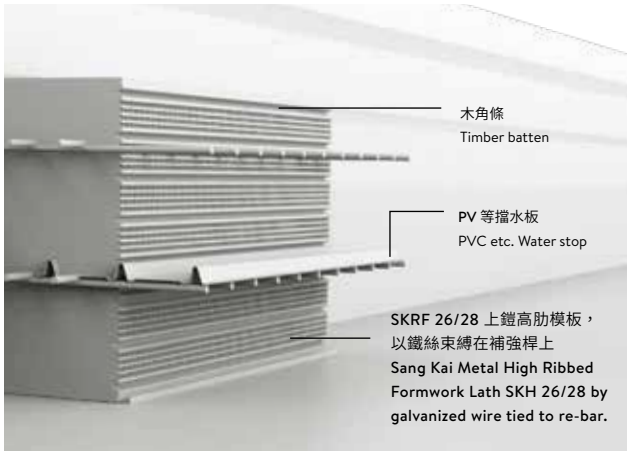
泛面組裝方式

使用上鎧金屬高肋模板進行泛面組裝時 , 鄰接模板兩端之尾部必須有 150mm 以上的重疊搭接。而鄰接模板其邊肋條搭接時 , 最少須搭接 一條肋條。搭接後 , 尾部重疊搭接部分須使用鍍鋅鐵絲環繞肋條紮捆 在支撐上 , 或以鐵釘釘穿肋條確實固定在支撐上 , 而邊肋條搭 接 部分每間隔 150mm 將搭接肋條予以紮綁。所有尾端搭接必須固定在支撐 上 (請參閱圖八)。

BUILDING UP A LARGE AREA

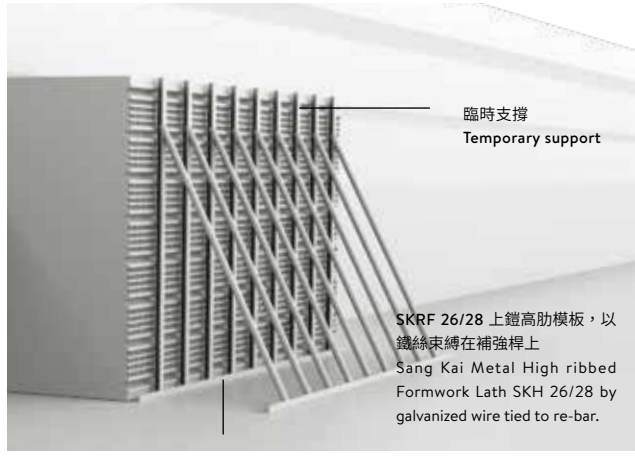
The FORMWORK shall be overlapped with a minimum distance of 150mm at the end-laps. Overlapping of the side lap shall be on one rib only. For the end laps, the overlapping shall be fixed together by galvanized wires or nailing onto the supports. For side laps, a standard distance of 150mm between fixing point applies. It is important that the end-laps shall always be on the supports (See Fig 8)

(圖三) Fig. 3



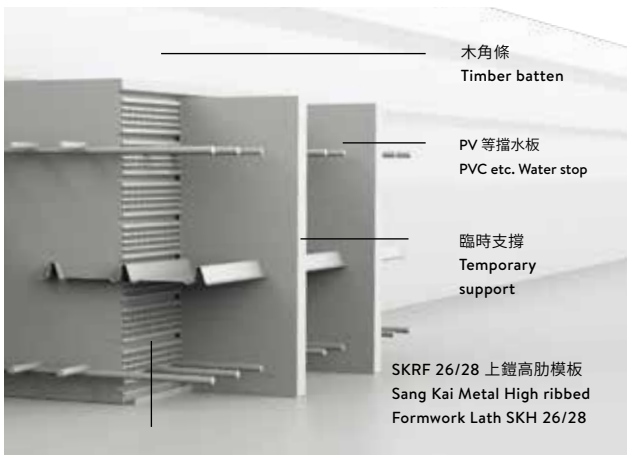
附氯乙烯擋水板補強桿支撐構築連接縫
Joint with PVC water stop with re-bar supports.

(圖四) Fig.4



擋土牆構築應用
Retaining walls construction application.

(圖五) Fig.5



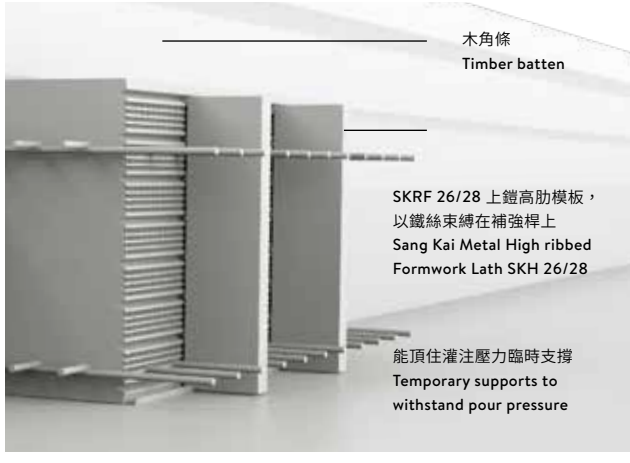
附擋水木材支撐構築連接縫
Joint with water stop timber supports.

(圖六) Fig.6



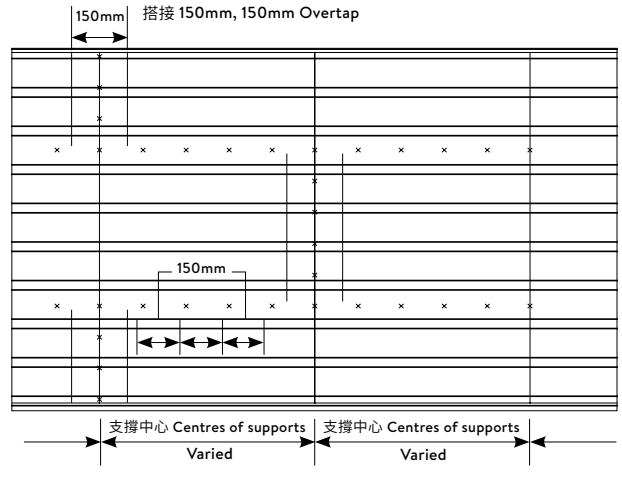
補強桿支撐之標準構築連接縫
Standard Joint with re-bar supports.

(圖七) Fig.7



木材支撐標準構築連接縫
Standard Joint with timber supports.

(圖八) Fig.8



X 以 1.63mm 徑之鍍鋅鐵線予以紮綑固定
X Mark by 1.63mm galvanized soft wire tie location.

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