

SEACERA

TILES BERHAD

(163751-H)

SEACERA TILES BHD Company Profile

SEACERA TILES BERHAD Lot 16428, 14Km, Jalan Ipoh, Kawasan Perindustrian Selayang,
68100 Batu Cave, Selangor, Malaysia. Tel : 603-6136 2493 Fax : 603-6136 2495 www.seacera.com.my

V1 Feb 07



COMPANY PROFILE

CORPORATE HISTORY

Seacera Tiles Berhad was originally incorporated under the name of Seacera Tiles Sdn Bhd in 1987 and was converted into a public company in 1995 as part of its listing exercise. The company was listed on the Kuala Lumpur Stock Exchange (now Bursa Malaysia Securities Berhad) on 27 May 1999.

PRINCIPAL ACTIVITIES

The SEACERA Group of Companies is one of the pioneer companies in the Malaysian ceramic industry, starting with bricks and refractory bricks production before venturing into fully vitrified homogenous porcelain tiles manufacturing in 1987 using European technology and machinery. The Group continued to grow and in 1999, the holding Company, SEACERA TILES BERHAD, was listed on the then Kuala Lumpur Stock Exchange (now Bursa Malaysia Securities Berhad). Since its listing as a tiles manufacturer, the Seacera Group now includes subsidiary companies involved in the manufacturer of Biaxially Oriented Polypropylene (BOPP) film, information technology as well as its latest venture into property development to complement the tiles business.

SUBSIDIARIES

Tiles Manufacturing & Marketing

- | | |
|----------------------------------|--|
| .Seacera Ceramics Sdn Bhd | Marketing of all kind of ceramic tiles and related product |
| .Seacera Porcelains Sdn Bhd | Manufacturing and trading of ceramic tiles and related Product |
| .Seacera Tiles Marketing Sdn Bhd | Trading of imported tiles |

Property development

- | | |
|------------------------------|----------------------|
| .Seacera Properties Sdn Bhd | Property development |
| .Seacera Builder Sdn Bhd | Construction |
| .Seacera Development Sdn Bhd | Property development |

BOPP Film

- | | |
|----------------------------|---------------------------------------|
| .Seacera Polymer Sdn Bhd | Investment holding |
| .Seacera Polyfilms Sdn Bhd | Manufacture and sale of BOPP products |

Multimedia Technology

- | | |
|-----------------------------|-----------------------|
| .Seacera Multimedia Sdn Bhd | Multimedia technology |
|-----------------------------|-----------------------|

TILES DIVISION

The Tiles Division of the Seacera Group through SEACERA TILES BERHAD and its tiles subsidiaries have carved out a niche producing top quality homogeneous vitrified porcelain tiles and many of its tiles can be seen in numerous prestigious projects and buildings including the hallmark tiles for several Banks and major institutions in Malaysia. Using European technology and machinery, it has also built up a reputation of producing tiles of international standards comparable to the leading European manufacturers.

In 2007, Seacera will commission the latest state-of-the-art Italian machinery capable of producing high-end technical porcelain tiles with the latest Italian contemporary designs including porcelain granite and marble. Ceramic wall and imported floor tiles are being added to the range of Seacera tiles and with the introduction of natural granite and natural marble, SEACERA will become a one-stop centre for tiles.

BOPP FILM DIVISION

The BOPP Film Division of the Seacera Group through SEACERA POLYFILMS SDN. BHD. is one of the only three companies in Malaysia manufacturing co-extruded BOPP Film. With an integrated state-of-the-art computerized thickness and profile gauging system, SEACERA POLYFILMS produces various BOPP Films suitable for a wide range of applications for both the domestic and international markets.

PROPERTY DEVELOPMENT DIVISION

The Property Development Division of the Seacera Group through SEACERA PROPERTIES SDN. BHD., will be embarking on its flagship development of a new township comprising 501.5 acres located on the south-eastern fringe of Kuala Lumpur city.

MULTIMEDIA TECHNOLOGY DIVISION

The Multimedia Technology Division of the Seacera Group through SEACERA MULTIMEDIA SDN BHD. and its associate companies are involved in the development and commercialization of integrated multimedia systems.

COMMITMENT TO QUALITY

At SEACERA, the assurance of quality is a fundamental aspect of daily production routine and top quality tiles and BOPP films are the cornerstone of all SEACERA products. BOPP Film production is ISO 9002 certified and the Tiles Division is actively pursuing ISO certification. The Tiles Division and BOPP Film Division are equipped with modern and up-to-date laboratory facilities for research and development and quality control to ensure that SEACERA products meet the highest possible standards and to keep abreast with the latest developments.



From its very humble beginning about 20 years ago with a tunnel kiln of 350 square metre per day output, today Seacera Tiles Berhad is producing about *6,000 square metre* of porcelain homogenous tiles from three production lines using machinery mainly from Italy and Germany.

Under the new innovative vision, the company is embarking on a plant upgrading to produce more new designs and larger size tiles so as to increase our competitiveness thus increasing our market share both locally and overseas.

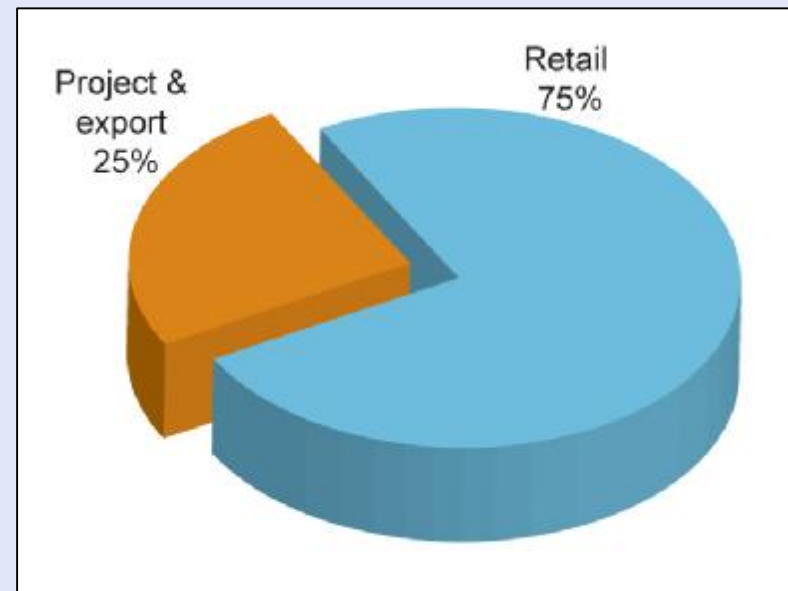
Presently our products consists of the traditional salt & pepper series, soluble salt series and decorated / painted series. By mid of 2007, we should be able to produce some of the latest products in the market using the latest multi-pipe, granulator and micronised powder technology.

Currently our machineries can only produce tiles of sizes up to 400 X 400mm and with the addition of another press and glazing line on line 3, we can then produce tiles of sizes up to 600 mm X 600 mm.

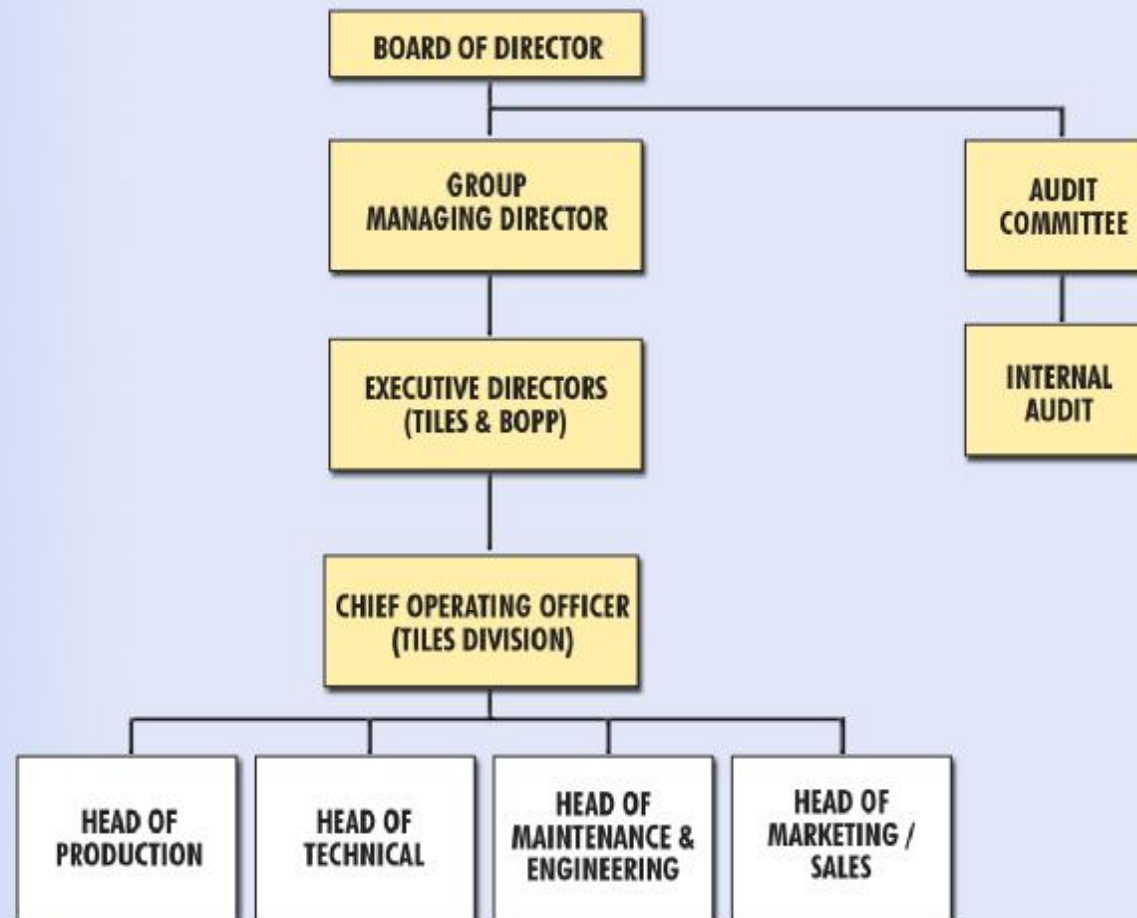
The marketing of our tiles is divided into three broad sectors namely Retail, Project and Export.

Our tiles are sold to distributor networks both locally and overseas.

Retail sales account for about 75 % of total sales while Project and Export sales account for the balance of 25 %.



ORGANISATION CHART OF SEACERA (TILES DIVISION)



SEACERA

Product Ranges & Application

Monotones Series



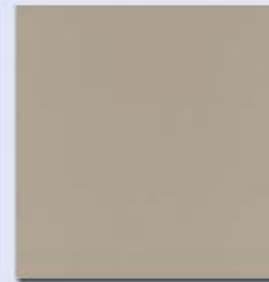
10A



20A



30A



30F



30G



60A



70A



70B



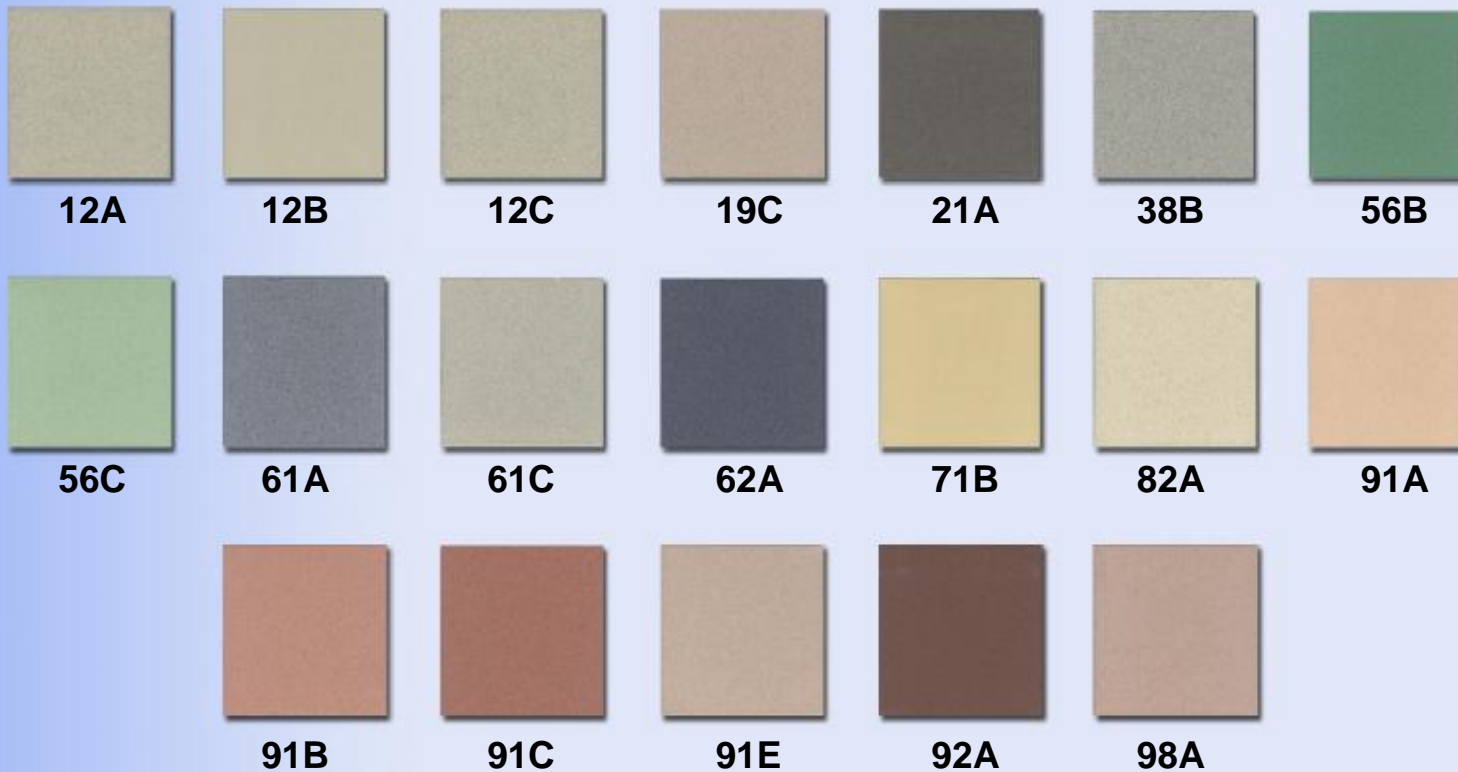
80A



90C

■ *Size Availability: 197 x 197mm, 297 x 297mm & 397x397mm*

Multitones Series (Salt & Pepper)



■ Size Availability : 197 x 197mm, 297 x 297mm & 397x397mm

Sierra Series



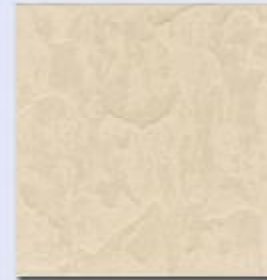
R3E-37



R3E-23



R3E-28



R3E-32



R3E-36



R3E-31



R3E-33



R3E-29



R3E-35

■ *Size Availability : 297 x 297mm & 297 x 597mm*

Romano Series



R3G-33



R3G-23



R3G-29



R3G-35

■ **Size Availability : 297 x 297mm**

Rawa Series



T3RA-10A



T3RA-20A



T3RA-20C



T3RA-30A



T3RA-38B



T3RA-40B



T3RA-56E



T3RA-80A

■ **Size Availability : 297 x 297mm**

Sienna Series



V3B-28



V3B-39



V3B-30



V3B-32

■ *Size Availability : 297 x 297mm & 297 X 597mm*

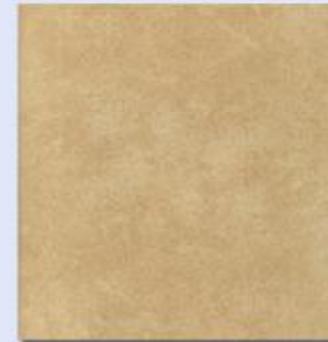
Casamia Series



R3H-22



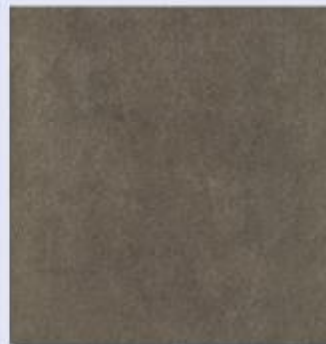
R3H-25



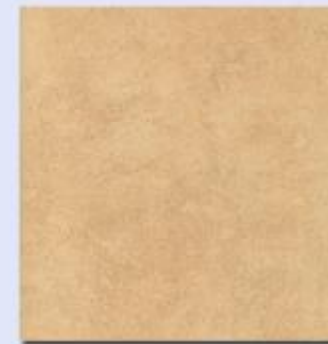
R3H-28



R3H-30



R3H-31



R3H-38

■ *Size Availability : 297 x 297mm & 297 X 597mm*

Starview Series



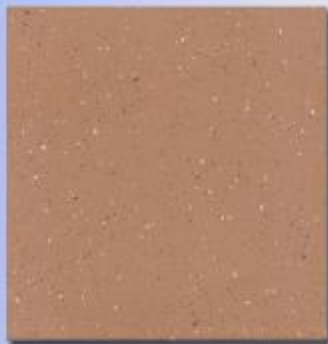
S3E-28



S3E-33



S3E-35



S3E-37



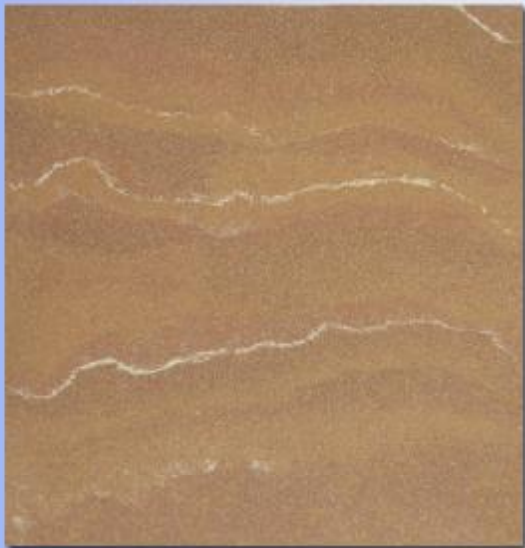
S3E-39



S3E-50

■ *Size Availability : 297 x 297mm & 297 X 597mm*

Bali Series



B01



B02



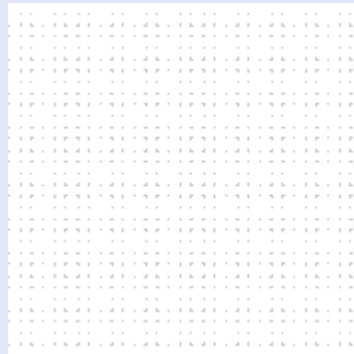
B03

■ *Size Availability : 397 x 397mm*

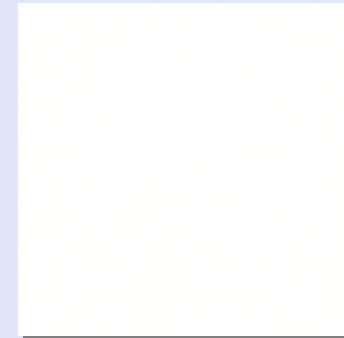
Migelan Series



SH88902



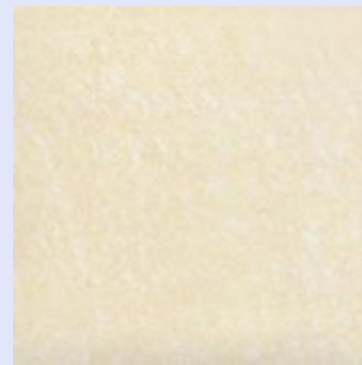
SF8201



SF8209



SG8301



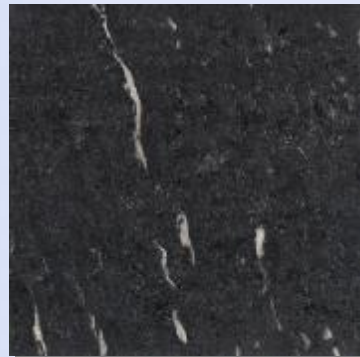
SG8302

■ *Size Availability : 800 x 800mm*

Oceano Series



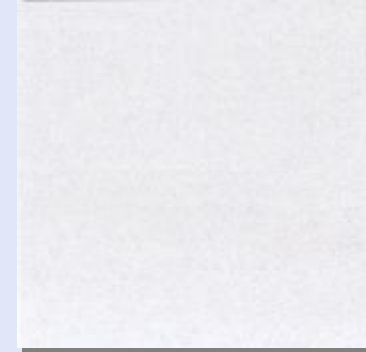
**TZ20060P-BS30
(600X600MM)**



**TM80160P-AJ10
(600X600MM)**



**Z20280P-CA20
(800X800MM)**



**G00160120P-BC40
(600X1200MM)**

Waterjet Design Series



S-A01-66-A-GP



S-A01-66-B-GP



S-A01-66-C-GP



S-A01-66-D-GP



S-A01-66-E-GP



S-A01-66-F-GP



S-A01-66-G-PL



S-A01-66-H-PL



S-A01-66-J-GP

■ *Size Availability : Tailored to Customer's Requirements*

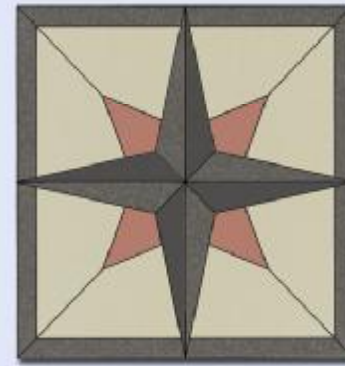
Waterjet Design Series



S-A02-1212-A-GP



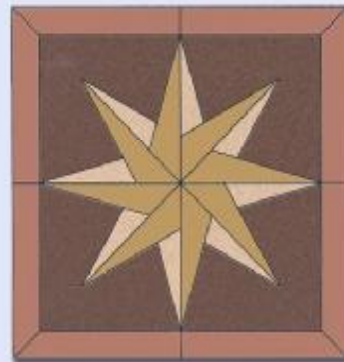
S-A02-1212-A-PL



S-A03-66-A-PL



S-A04-66-A-PL



S-A05-66-A-PL



S-A06-66-A-PL

■ *Size Availability : Tailored to Customer's Requirements*

Waterjet Design Series



S-A07-69-A-PL



S-A08-69-A-PL



S-A09-66-A-PL



S-A10-66-A-PL



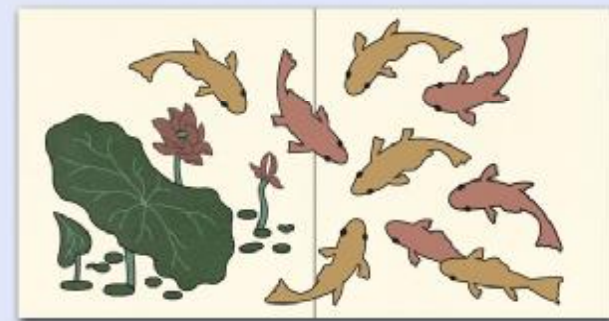
S-A11-66-A-PL



S-A12-66-A-PL



S-A13-66-A-PL



S-A14-0612-A-PL

■ *Size Availability : Tailored to Customer's Requirements*

Waterjet Design Series



S-A15-66-A-GP



S-A16-66-A-GP



S-A17-66-A-GP



S-A17-66-B-GP



S-A17-66-C-GP

■ *Size Availability : Tailored to Customer's Requirements*

TECHNICAL SPECIFICATION

Type of Test		Test Method	International Standard	Seacera Typical Standard
Dimension	Length & Width	ISO 10545 - 2	± 0.6 %	± 0.30 %
	Thickness	ISO 10545 - 2	± 5 %	± 3 %
	Straightness of Sides	ISO 10545 - 2	± 0.5 %	± 0.25 %
	Rectangularity	ISO 10545 - 2	± 0.6 %	± 0.30 %
Flatness of Surface	Centre Curvature	ISO 10545 - 2	± 0.5 %	± 0.25 %
	Warpage	ISO 10545 - 2	± 0.5 %	± 0.25 %
	Edge Curvature	ISO 10545 - 2	± 0.5 %	± 0.25 %
Water Absorption		ISO 10545 - 3	≤ 0.5 %	≤ 0.1 %
Modulus of Rupture		ISO 10545 - 4	Min. 35 N/mm ²	> 40 N /mm ²
Breaking Strength		ISO 10545 - 4	> 1300 N	> 1600 N
Deep Abrasion Test		ISO 10545 - 6	Max. 175 mm ³	Max. 145 mm ³
Chemical Resistance		ISO 10545 - 13	No visible changes	No visible changes
Stain Resistance		ISO 10545 - 14	Min. Class 3	Class 5

* The above Seacera Standard serves as general guidelines only. For specific technical performance please request a confirmation or report.

NOTABLE PROJECTS – TILES DIVISION

SEACERA

Seacera Tiles Berhad has participated in various prestigious projects.



Shopping Mall



National Monument



Mosque



Airport



Housing



Cafeteria



Stadium



Condominium



Bank

V1 Feb 07

NOTABLE PROJECTS – TILES DIVISION

SEACERA

Seacera Tiles Berhad has participated in various prestigious projects.



Golf Club



Hospital



Hotel



Office Building



Retail Outlets



Service Station



Transport



Universities



Hypermarket

NOTABLE PROJECTS – REFERENCE LIST

Airports	Subang, Senai
Banks	Maybank, Public Bank, EON Bank
Business Parks	Worldwide, Kelana Centrepoint, Amcorp Trade Centre, The Mines
Condominiums	Menara Polo, Commonwealth Games Village, Rampai Court, Parkview, Heritage, Venice Hill, Billion Court, Astana Square, Puchong Prima, Bandar Permaisuri, Cyberjaya
Golf Clubs	Tropicana Golf & Country Club, KRTU Golf Club, Golden Valley Golf Club, Kelab Rahman Putra, Serendah Gold Club, Palm Springs Resort
Hospitals	Serdang Hospital, Ipoh Specialist Hospital, Hospital Sultanah Aminah, HUKM
Hotels	Crown Princess, Concorde, Allson Klana, Travellers Lodge
Housing Projects	Taman Tun Razak, Taman Midah, Bandar Baru Nilai, Bandar Baru Klang, Cheras Utama, Taman Tun Dr. Ismail, Desa Sri Hartamas, Sierramas, Wangsa Maju, Desa Park

NOTABLE PROJECTS – REFERENCE LIST

Office Buildings	Menara ESSO, IMC Tower, MBf HQ, UOA, Menara Tan & Tan
Retail Outlets	Seven Eleven, Guardian Pharmacy, Courts Mammoth
Service Stations	Petronas, Shell, Project, Mobil / Esso
Shopping Malls	The Mines, Amcorp Mall, Orchard Square, Metrojaya, The Store, Warta Supermarket, Kotamas, Parkson, Jaya Jusco
Stadiums	Shah Alam Indoor Stadium, Sukan Negara Bukit Jalil, Stadium MPPJ
Transport	KL Sentral
Universities	UIA, University Malaya, ITM, UITM

Distributors

Retail	Project	Export
<ul style="list-style-type: none"> • Concrete • Infon-MAL • Jubin BMS • Kah Guan • Kuasada • Weng Kong • Prowess • Tanbar • Topcera • UMT • WK Ceramic • Wah Seng 	<ul style="list-style-type: none"> • BNK Resources • Boustead • Buimico • Bumi Luas • Chuan Huat • IJM Construction • Optad Marketing • Posim Marketing • SP Setia • Hoover • Low Brother Mason • Shanghai Sing Mee • Teong Hoe • Insamadu • Nam Fatt 	<ul style="list-style-type: none"> • Bettertiles • Parrella Tiles • National Tiles • Encore • TSL • Cermark • Arnhold • Premio • Wah Yan Hong • Appian • Euro Tiles • Caltiles • Ong Brothers • D&S Ceramics • Mega Tiles

Worldwide Distribution



Australia



Hong Kong



Brunei



Japan



New Zealand



U.A.E



Philippines



South Africa



Singapore

Different types of tiles in the market

1) Glazed and Unglazed Ceramic Tiles

- Water Absorption 15% - 20%
- Modulus of Rapture Min. 15N/mm square.

2) Glazed and Unglazed Porcelain Homogenous Body Tiles

- Water Absorption 0.6% - 3%
- Modulus of Rapture Min. 27N/mm square. – 40N/mm square.

3) Full Body Porcelain Homogenous Body Tiles

- Water Absorption $\leq 0.5\%$
- Modulus of Rapture Min 40N/mm square.

Typical **SEACERA** Specifications
Full Body Porcelain
Homogeneous Tiles

- 1) Water Absorption – ≤ 0.1
- 2) Modulus of Rapture – $> 40\text{N/mm square.}$

(S) 000312



**KEMENTERIAN KEWANGAN MALAYSIA
AKUAN PENDAFTARAN KONTRAKTOR (SEMENTARA)**

No. RUJUKAN PENDAFTARAN : 357-02075645

TEMPOH : 17/01/2007 - 16/01/2008

Bahawa dengan ini diperakui syarikat:

SEACERA TILES BERHAD
LOT 16428, 14KM,
JALAN IPOH,
KAWASAN PERINDUSTRIAN SELAYANG
68100 BATU CAVES
SELANGOR

telah berdaftar dengan Kementerian Kewangan Malaysia dalam bidang
bekalan/perkhidmatan di bawah kepala dan sub-kepala berikut:

.....
130100, 140100, 140199, 220801, 220802, 220803 ***
.....

Kelulusan ini adalah tertakluk kepada syarat-syarat seperti dinyatakan
di sebelah

MAD YUSOFF BIN ABD RAHMAN
Beliauan Pengurusan Perolehan Kerjasama
d.p. Ketua Setiausaha Perbendaharaan
Kementerian Kewangan Malaysia



Bertarikh: 17/01/2007

No. Lesen : **PS068501**
Licence No.:



LESEN PERSIJILAN BARANGAN
Product Certification Licence



SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada
SIRIM QAS International Sdn. Bhd. hereby grants to

SEACERA TILES BERHAD
LOT 16428, 14KM. JALAN IPOH
KAWASAN PERUSAHAAN SELAYANG
68100 BATU CAVES
SELANGOR DARUL EHSAN



Lesen untuk menggunakan Tanda Persijilan di atas barangan
a licence to use the Certification Mark on

CERAMIC FLOOR TILES
Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan
as complying with

MS ISO 13006:2003



Hj. Ab. Razak bin Saikin
Pengerusi Eksekutif
Executive Director
SIRIM QAS International Sdn. Bhd.

Dr. Dr. Mohd. Ariffin bin Hj. Alon
Pengerusi
Chairman
SIRIM QAS International Sdn. Bhd.

Tarikh Mula Persijilan : 19 December 2003
Certified Since:

Tarikh Dikeluarkan : 05 March 2007
Issue Date:

Sah Sehingga : 19 December 2007
Valid Until:


No. Sirim : 0376
Serial No.:

SIRIM QAS International Sdn. Bhd.
110, Sungai Puteh 41
1, Persiaran Seri Selayang
Bangunan 3, The Summit Tower
40170 Sungai Buloh
Selangor Darul Ehsan
MALAYSIA
Tel : 603-5523 8222
Fax : 603-5523 8282

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PCSP008-41
Rev. 3/06-1

No. Lesen : **PS068501**
Licence No.:




SCHEDULE

SEACERA TILES BERHAD



BRAND : SEACERA
MODEL : GROUP BIA - GLAZED
(THICKNESS MORE THAN OR EQUAL TO 7.5MM)
INDICATION OF FIRST QUALITY : PREMIUM GRADE
RATING : NON MODULAR
10CM X 20CM, 15CM X 15CM, 20CM X 20CM
30CM X 30CM, 40CM X 40CM



Sah Sehingga : 19 December 2007
Valid Until:

Tarikh Dikeluarkan : 05 March 2007
Issue Date:

PCSP008-41
Rev. 3/06-1

THANK YOU

Q & A

ANY?

SEACERA

Tiles Making
Processes

The three main factors required for the production of porcelain homogeneous tiles are the following :

- The raw material must be milled to a fineness of below 63 microns
- The forming pressure must be at least 350 kg / cm²
- The firing temperature must be at least 1200 °C

The production is broadly divided into the following :

- ✓ Raw material preparation
- ✓ Forming and Glazing
- ✓ Firing
- ✓ Sorting and Packing

Raw Material Preparation

The ingredients like ball clay, feldspar, silica sand and etc are weighed and fed into the ball mills. Water and other additives are also added before they are milled for about 20 hours after which they are transformed into a slurry or slip and discharged for storage in the underground tanks.

The slip will then be screened and sprayed into powder using the spray dryer. Spray dried powder will then be conveyed into primary silos for storage. After aging for a few days, it will be mixed according to certain formula and then will be conveyed to a battery of secondary silos.

The powder from the secondary silos will then be directed to the various presses for forming.

Forming and Glazing

In this section, powder from the secondary silos will be formed into tiles of various sizes and textures using hydraulic presses. After pressing, the raw tiles (so-called green tiles) are dried in vertical dryers to remove any residual moisture in the tiles.

The dried tiles are then glazed or printed on the glazing lines to obtain the desired effect. These tiles are then automatically stored into the storage cars.

Firing

At this stage, the tiles from the storage cars will be unloaded onto the kiln entrance and these tiles will be transported slowly row by row into the kiln on ceramic rollers.

Sorting and Packing

Fired tiles exited from the kiln will be checked for size variations, shade variations, physical defects and appearances before packing.

Tile Manufacturing Process

RAW MATERIAL

Coarse Crushing
Batching
Ball Milling

SLIP TANK

Sieving
Spray Drying

POWDER SILO

Batching

PRESS HOPPER

Press Forming
Drying

Glazing & Printing

BISQUES STORAGE

Single Fast Firing
Sorting & Packing

STORE



RAW MATERIAL

Coarse Crushing

Batching

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STORE



RAW MATERIAL

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SLIP TANK

Sieving
Spray Drying

POWDER SILO

Batching

PRESS HOPPER

Press Forming
Drying

Glazing & Printing

BISQUES STORAGE

Single Fast Firing
Sorting & Packing

STORE



RAW MATERIAL

- Coarse Crushing
- Batching
- Ball Milling

SLIP TANK

- Sieving
- Spray Drying

POWDER SILO

- Batching

PRESS HOPPER

- Press Forming
- Drying
- Glazing & Printing

BISQUES STORAGE

- Single Fast Firing
- Sorting & Packing

STORE





RAW MATERIAL

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- Batching
- Ball Milling

SLIP TANK

- Sieving

Spray Drying

POWDER SILO

- Batching

PRESS HOPPER

- Press Forming
- Drying
- Glazing & Printing

BISQUES STORAGE

- Single Fast Firing
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STORE



RAW MATERIAL

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↓

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STORE





RAW MATERIAL

- Coarse Crushing
- Batching
- Ball Milling

SLIP TANK

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RAW MATERIAL

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Ball Milling

SLIP TANK

Sieving
Spray Drying

POWDER SILO

Batching

PRESS HOPPER

Press Forming
Drying
Glazing & Printing

BISQUES STORAGE

Single Fast Firing
Sorting & Packing

STORE



RAW MATERIAL

Coarse Crushing
Batching
Ball Milling

SLIP TANK

Sieving
Spray Drying

POWDER SILO

Batching

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THE END

Thank
You

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