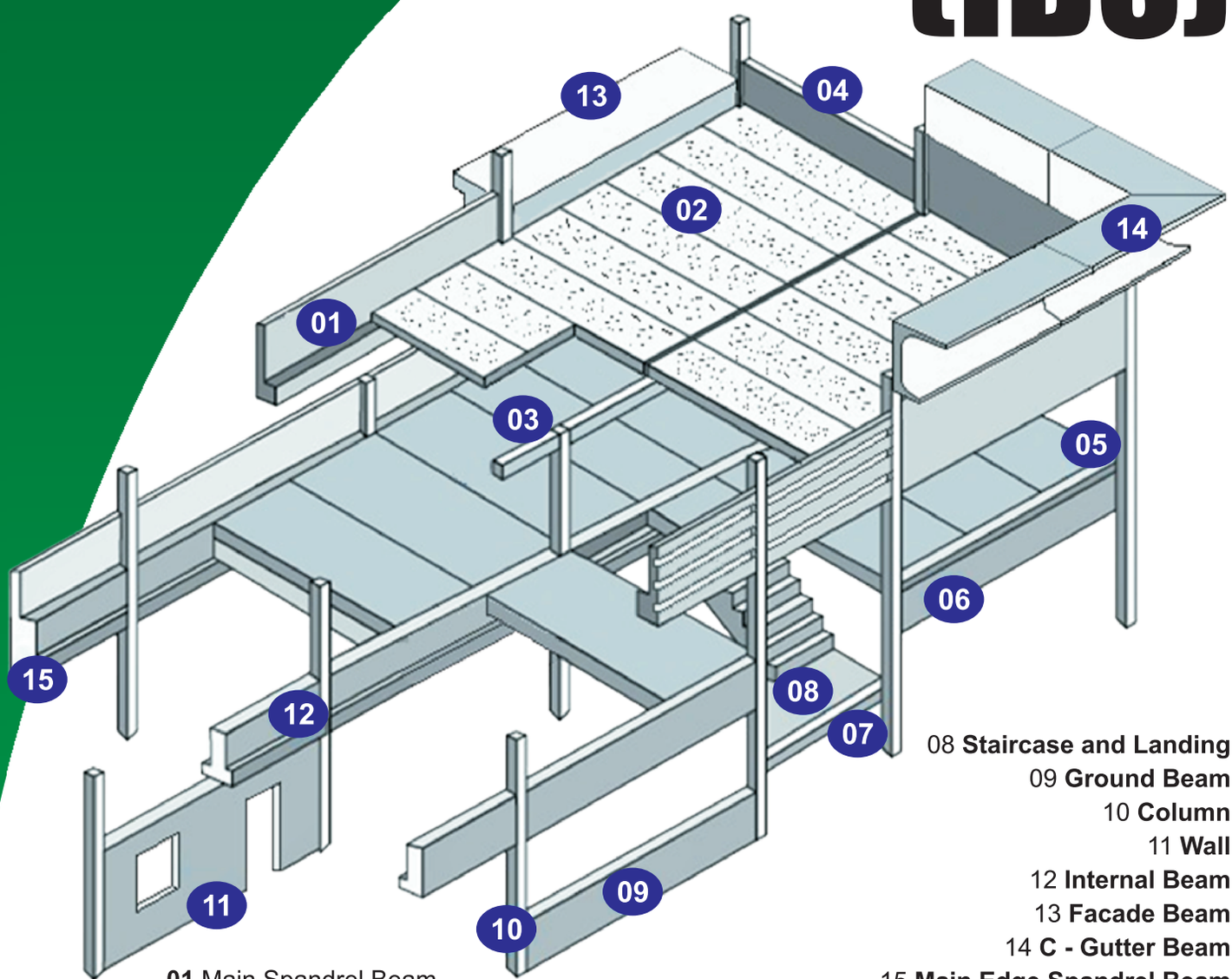
SEDCO PRECAST

INDUSTRIALISED BUILDING SYSTEM (IBS)



01 Main Spandrel Beam
02 Plank
03 Internal Rectangular Beam
04 Gable Spandrel Beam
05 Gable Beam
06 Main Edge Beam
07 Landing Support Beam

08 **Staircase and Landing**
09 **Ground Beam**
10 **Column**
11 **Wall**
12 **Internal Beam**
13 **Facade Beam**
14 **C - Gutter Beam**
15 **Main Edge Spandrel Beam**

QUALITY SYSTEM
SIRIM
UKAS QUALITY MANAGEMENT
074
MS ISO 9001 : 2015 REG NO AR 2824

SEDCO Precast Sdn. Bhd. (328669-K)

(A member of SEDCO Group)

7th Km, Tuaran-Kota Belud Highway Kg. Kindu, P. O. Box 405, 89208-Tuaran, Sabah.
Tel: 088-791326, 792326, 793326 Fax: 088-794327

PROFILE

SEDCO PRECAST

SEDCO Precast Sdn. Bhd., a majority-owned subsidiary of SEDCO (Sabah Economic Development Corporation), was incorporated under The Company Act, 1965 on 13th December 1994 under the name Associated Concrete Products (Sabah) Sdn. Bhd. (ACPS). The company operation began on 2nd January 2003 and only manufactured reinforced concrete piles and reinforced concrete box culverts for 10 years.

In March 2013, Sinajasa Sdn. Bhd., a subsidiary of public listed Gabungan AQRS Berhad became the new shareholder in ACPS when it acquired 49% stake in the company from Associated Concrete Products (M) Sdn. Bhd. and the company was officially renamed as **SEDCO Precast Sdn. Bhd.** on 17th February 2014 and at the same month, the company secured its 1st Industrialised Building System (IBS) project through Vinci Construction Grands Projets for the supply of precast planks for Plaza Shell, Kota Kinabalu. The company's successful achievement in that project led to the supply of IBS components to other iconic project in Kota Kinabalu namely Makhamah Tinggi Kota Kinabalu, Custom Quarters and Jesselton Residence making it a prominent IBS supplier in Sabah.

WHAT IS IBS ?

Industrialised Building System or widely known as IBS is a construction system that utilises pre-fabricated or precast components manufactured off site which will later be transported and installed by CIDB certified installer at site. The IBS components manufactured by **SEDCO Precast Sdn. Bhd.** are columns, beams, slabs (or planks),walls, stairs and other customised components that suit the needs of customers (C-Gutter, wheel stoppers, lintel etc.).

The benefits of IBS are:

A. Less construction time as work are done concurrently at factory and worksite

B. Requires less workers at site

C. Better Quality as quality are controlled in factory environment and concrete grade is higher for early handling purpose

D. As steel formwork is used instead of timber for durability, the finishing is better thus environmental friendly because less material especially timber will be used

E. Cleaner and manageable worksite as less formwork and scaffolding will be required

Due to the various benefits of IBS, the government under Construction Industry Development Board (CIDB) had established policies to encourage the use of IBS in all government buildings because it is not only time and cost efficient but also less dependent on foreign workers and it shall be future of construction industry.

HALF SLAB / PLANK

Half Slab / Plank panels are use as permanent formwork for an in-situ concrete topping to achieve a solid composite floor. This panel units are typically 55mm to 100mm in thickness and 2400mm in width. Floor planks are made reinforced concrete, with lengths produced to suit the floor span.

To ensure good interaction between precast plates and in-situ concrete, the planks may be provided with protruding reinforcement or lattice girders. The floor-plates normally need propping during construction, at a spacing of 1.5 to 3.5 metres, depending on the upper flange of the girder.

The essential advantages of this system compared to traditional cast in-situ floors are :-

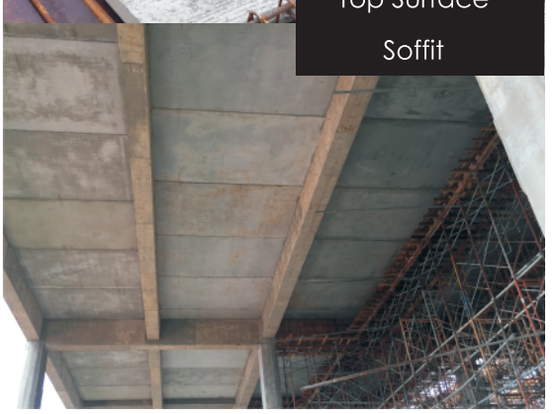
- Minimise temporary support during the construction phase.
- No moulds have to be used and the sagging reinforcement is readily incorporated in the prefabricated plate.
- A steel mesh in the in-situ topping acts as hogging reinforcement.
- The floor slab may therefore be designed as continuous.

Without Lattice

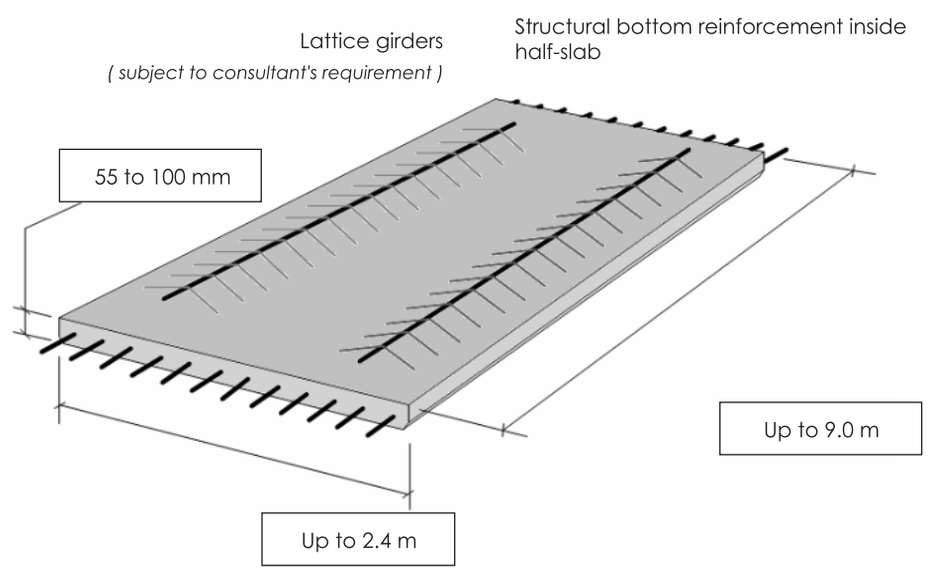
With Lattice

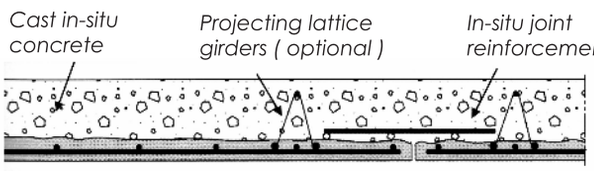
Top Surface

Soffit



TYPICAL VIEW SPSB HALF-SLAB/PLANK





Reinforced concrete floor half-slab/plank

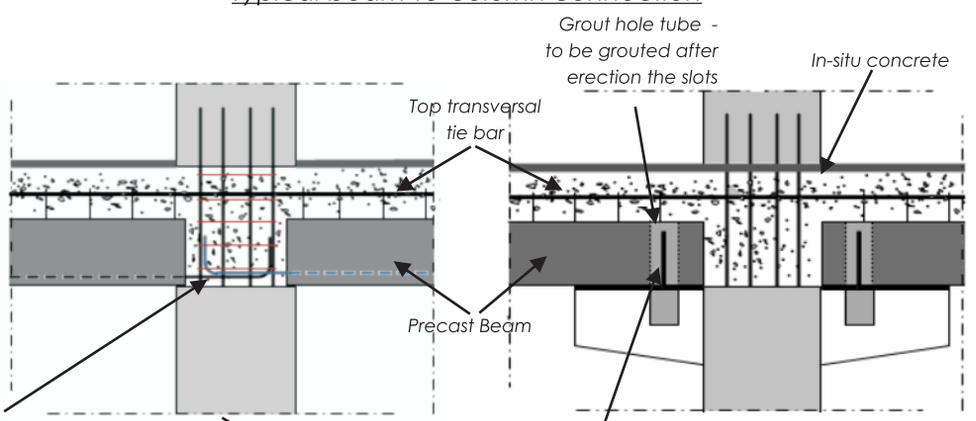
BEAMS

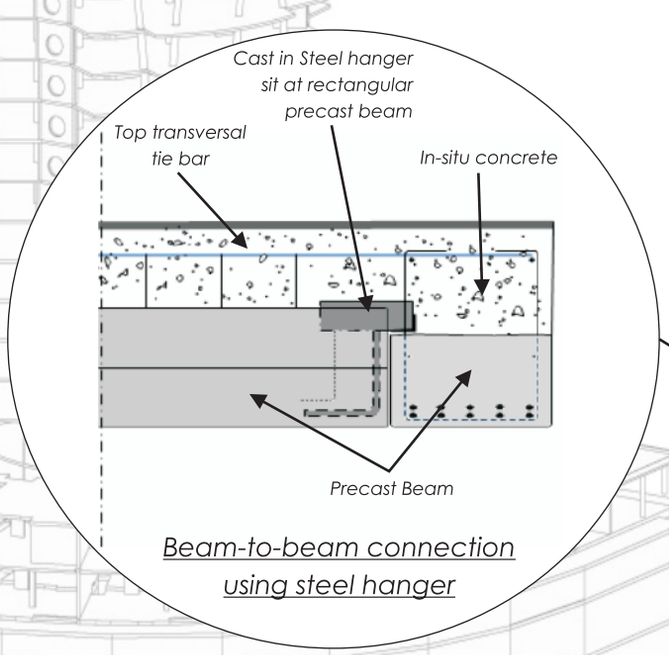
L-shape Beam

Precast Beam are horizontal components that support deck structural member like half-slab, hollow-core slab, in-situ concrete floor and other beams. They can be reinforced with either pre-stressing strand or conventional reinforcing bars.

SPSB can manufacture beams based on client specification to suit individual client requirements. This will depend on the spans, loading conditions, and production method.

Typical beam-to-column connection





Beam-to-beam connection using steel hanger


Rectangular Beam


Beam-to-beam connection


Facade Beam

COLUMNS

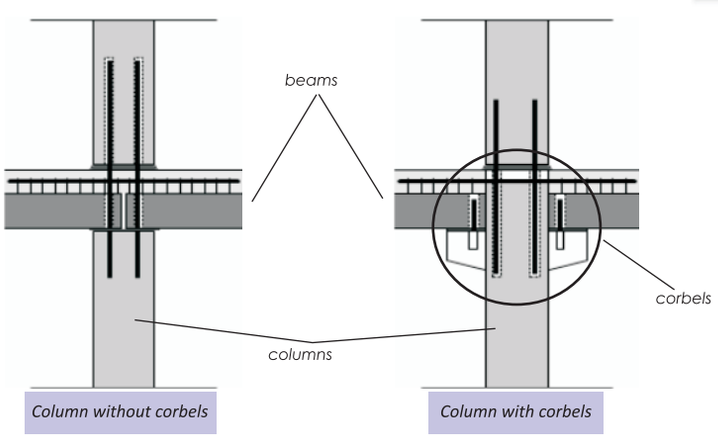
Precast columns are manufactured in a variety of sizes, shapes and lengths. The concrete surface are smooth and the edges of rectangular columns are chamfered.
Columns generally require a minimum cross-sectional dimension of 300 mm, not only for reasons of manipulation but also to accommodate the column-beam connections and tolerances.

b/h	300	400	500	600	800
300					
400					
500					
600					
circular					

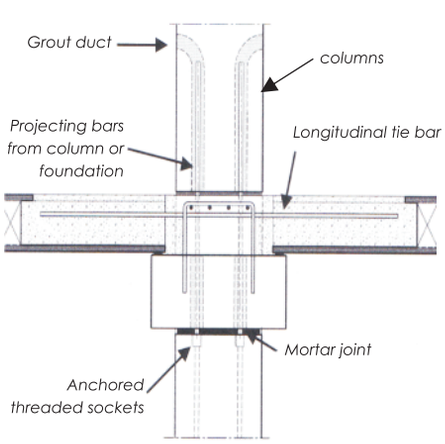
**SPSB Standard column dimensions*

Columns may be continuous to the full height of the building or may be stepped back at an intermediate level to satisfy architectural requirements. As with any form of construction, it is desirable to keep columns in vertical alignment and it is preferable to terminate columns at positions where the floor or roof construction can span over the columns.

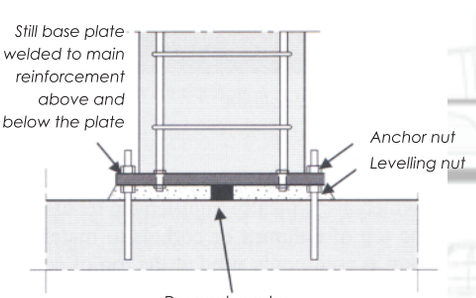
At floor levels, columns may have corbels or structural inserts to provide support for the beams. The positions of the inserts or corbels may be varied to provide connections these variations to a minimum.



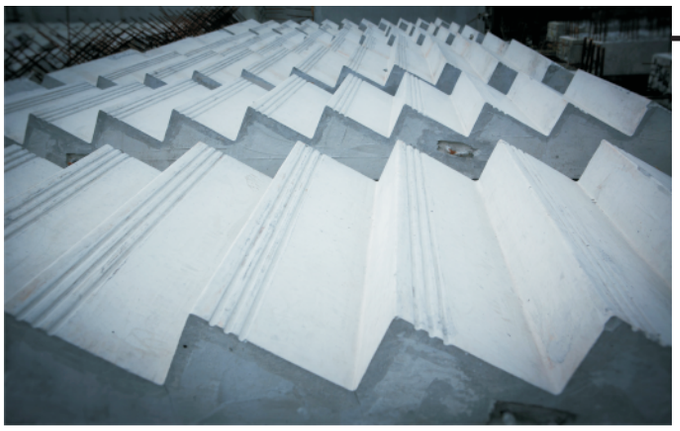
Connections column to column to beam



Typical column - beam connection



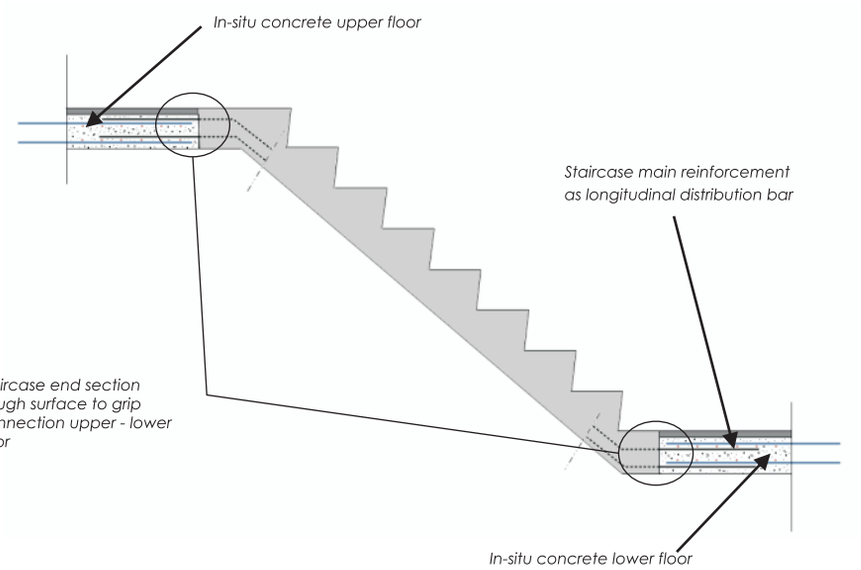
Typical column - foundation connection



STAIRCASES

Precast concrete staircases are very attractive products because of their improved finishing and cost efficiency. Traditionally cast in-situ staircases are very labour intensive, with additional finishing material always needed and the effective total cost often underestimated.

Precast concrete stair units are industrialized products with a high degree of finishing, ranging from smooth as-cast to polished concrete.



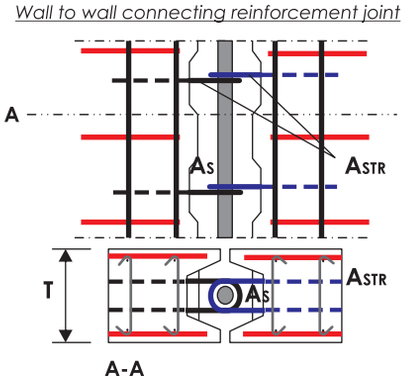
Typical connections staircase - floor

WALLS

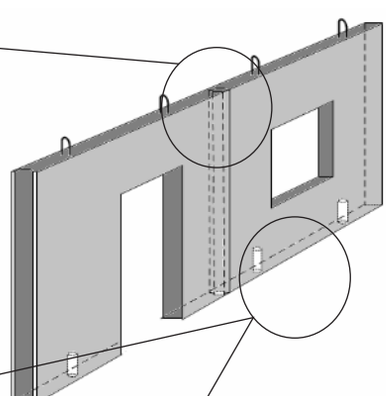
Precast wall systems are used for internal and external walls of low and multi-storey buildings, where mainly used in housing and apartments but also in hotel, hospitals, office buildings and other similar types of construction. They are also frequently used for central cores, lift shafts and stiffening or infill walls in all types of buildings. Finally, precast walls are commonly used as fire separation walls.

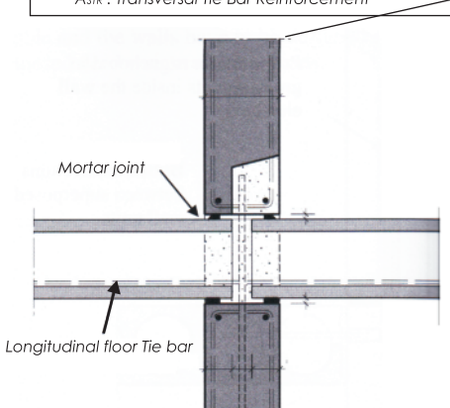
Besides fast and industrialized construction, precast walls offer a smooth and ready-to-paint surface finishing, good acoustic and thermal properties and fire resistance of up to 6 hours.

Wall to wall connecting reinforcement joint

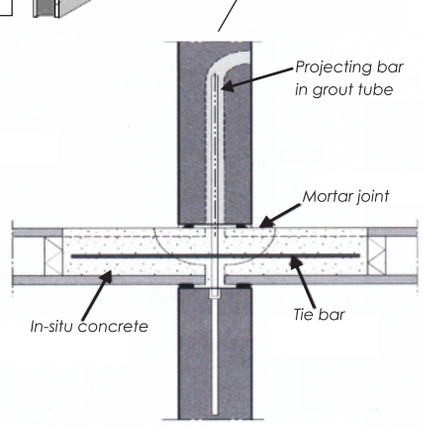


Thickness: 75mm - 175mm
As : Longitudinal Distribution Bar
Astr : Transversal Tie Bar Reinforcement





Wall-to-floor connections at intermediate load-bearing walls



Typical connections wall-to-floor

CUSTOMISED

Parapet Wall

SEDCO PRECAST SDN BHD. will also produce customised product to suit customers requirement provided cost is justifiable. Examples of customised product is as below :

Concrete Tiles

Bench & Planter Box

Bench

C Gutter Beam

Tyre Stopper

Counter Weights

PROJECT REFERENCE

CERTIFICATION

CIDB MALAYSIA

PENILAIAN PENGELUAR BERSTATUS IBS
ASSESSMENT OF IBS STATUS MANUFACTURER (AIS)

No. Siri : 6716
Serial No. :

Adalah dengan ini disahkan bahawa :
It is hereby verified that :

SEDCO PRECAST SDN BHD
(328669-K)
KM 7, JALAN TUARAN – KOTA BELUD
KAMPUNG KINDU
P.O.BOX 405
89208 TUARAN SABAH

Merupakan :
Is :

PENGELUAR

Lokasi Kilang :
Factory Location :

KM 7, JALAN TUARAN – KOTA BELUD
KAMPUNG KINDU
P.O.BOX 405
89208 TUARAN SABAH

No. Laporan :
Report No. :
ASB281016IBSC0605

Tarikh Dikeluarkan :
Issue Date :
23 DISEMBER 2016

Sah Sehingga :
Valid Until :
22 DISEMBER 2019

Sebagai syarikat Status IBS yang mengeluarkan produk IBS berikut:
As an IBS status company that manufactures the following IBS components:

SISTEM KONKRIT PRATUANG :
- *COLUMN*
- *BEAM*
- *SLAB*

****

Kategori : A
Category :

Pusat IBS, CIDB Malaysia
Galeri Komponen IBS
Lot 8, Jalan Chan Sow Lin
55200 Kuala Lumpur
Malaysia

TEL: 03-92816909
FAX 03 92815870

Laman Web
ibs.cidb.gov.my

DATUK IR. ELIAS ISMAIL
b.p Ketua Eksekutif
CIDB Malaysia

Pendaftaran ini hendaklah diperbaharui selewat-lewatnya 30 hari sebelum tarikh tamat tempoh.
This registration shall be renewed within 30 days before expiration date.

SIRIM QAS INTERNATIONAL

CERTIFICATE

QUALITY SYSTEM SIRIM

STANDARDS MALAYSIA

IQNet

SIRIM QAS International hereby certifies that

SEDCO PRECAST SDN. BHD.
7TH KM, TUARAN-KOTA BELUD HIGHWAY
KG. KINDU
89208 TUARAN
SABAH
MALAYSIA

has implemented a Quality Management System complying with

ISO 9001:2015

QUALITY MANAGEMENT SYSTEMS - Requirements

Scope of Certification

MANUFACTURE OF PRECAST REINFORCED CONCRETE PRODUCTS (SQUARE PILES, BOX CULVERTS, OPEN DRAINS, L-SHAPES AND OTHER PRECAST CONCRETE PRODUCTS).

Issue date : 08 February 2017
Validity period : 14 March 2015 - 13 March 2018
Certification No. : AR 2824

SIRIM QAS International Sdn. Bhd.
(Company No. 460334-H)
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel : 60-3-5544 6404
Fax : 60-3-5544 6787

http://www.sirim-qas.com.my
http://www.malaysiancertified.com.my

Mohd Azanuddin Salleh
Managing Director
SIRIM QAS International Sdn. Bhd.

This certificate is granted subject to the terms and conditions as stated in the Certification Agreement