MTR ENGINEERING SDN. BHD.
(CO.NO:32999 -W)
1st Floor, Block C, Lot 23A, Bundusan Commercial Centre,
Jalan Bundusan, 88300 Kota Kinabalu, Sabah.
E-mail:- mtrengineeringsdnbhd@gmail.com
TEL: 088-723935 FAX: 088-723934

Rujukan Tuan:
Rujukan Kami: MTR/KPKT/JBPM/2021/098
Tarikh : 17 SEPTEMBER 2021

ALASIM OMAR ARCHITECT
F-27-1, Royal Plaza Putatan KM11.2,
Jalan Putatan,
88200 Kota Kinabalu, Sabah.
Tel : 013-397 5752
Email : alasim.architect@gmail.com

Tuan,

PEMBINAAN PROJEK BALAI BOMBA DAN KUARTERS PUTATAN, SABAH
(KPKT/BPEMB/JPBM/6/14/2021)
- Material Submission: Rain Water Down Pipe

Merujuk kepada perkara di atas.

02. Bersama-sama dengan surat ini disertakan dokumen untuk ulasan dan kelulusan daripada pihak tuan.

a. Katalog

03. Segala perhatian dan kerjasama daripada pihak tuan amatlah dihargai

Sekian dan Terima Kasih.

Yang Benar,

.....
MTR Engineering Sdn. Bhd.
(SUFIAN BIN SUTRESNO)
Pengurus Pembinaan

sk.
~ Kementerian Perumahan Dan Kerajaan Tempatan (KPKT)
~ Perunding Ideal (C&S)
~ Jurutera Perunding Intelek S/B (M&E)
~ Jurukur Bahan Konsultant (Sabah)

BORANG KELULUSAN BAHAN/PEMERIKSAAN MOCK-UP

Note: *Potong mana yg tidak berkenaan.

PROJEK: MEMBINA BALAI BOMBA DAN KUARTERS PUTATAN, SABAH. No. Kontrak : KPKT/BPEMB/JBPM/6/14/2020		**Kontraktor :** MTR ENGINEERING SDN.BHD.	
BUTIRAN KERJA KELULUSAN BAHAN/MOCK-UP/ DESKRIPSI ITEM SAMPEL: • RAIN WATER DOWN PIPES		**Lokasi Mock-~~up~~/ Bahan/Kerja** : Kota Kinabalu	**Tarikh :** 17/09/2021
Model: **Kod Item:**	**Pengilang:** TTS PIPES & FITTINGS SDN BHD	**Negara.Asal** : Malaysia	**Pengedar Tempatan :** TTS PIPES & FITTINGS SDN BHD

PERAKUAN PERUNDING (ARKITEK) (*Jika projek R&B*):

Saya dengan ini mengesahkan bahawa cadangan bahan/peralatan/*mock-up* adalah mematuhi kehendak spesifikasi dan berfungsi seperti kehendak kontrak.

Disertakan

Katalog [√] Lukisan [ ] Sampel Bahan [ ] Spesifikasi [ ] Sijil [ ]

Sampel kerja [ ] *Mock-up* [ ]

Tandatangan Perunding Arkitek *	**Jawatan/Cap Rasmi :**
Nama : **Ar.Datu Alasim Datu Omar**	Tarikh :

PERAKUAN KONTRAKTOR:

Saya dengan ini berjanji akan mematuhi kehendak CPP/Perunding* dan memastikan *bahan/peralatan/mock up/kerja yang dicadangkan mengikut spesifikasi dan berfungsi seperti di dalam kontrak.

Tandatangan Wakil Kontraktor	**Jawatan/Cap Rasmi** Pengurus pembinaan
Nama : **Sufian Bin Sutresno**	Tarikh : 17-09-2021

KEPUTUSAN ~~JKR~~ CPP:

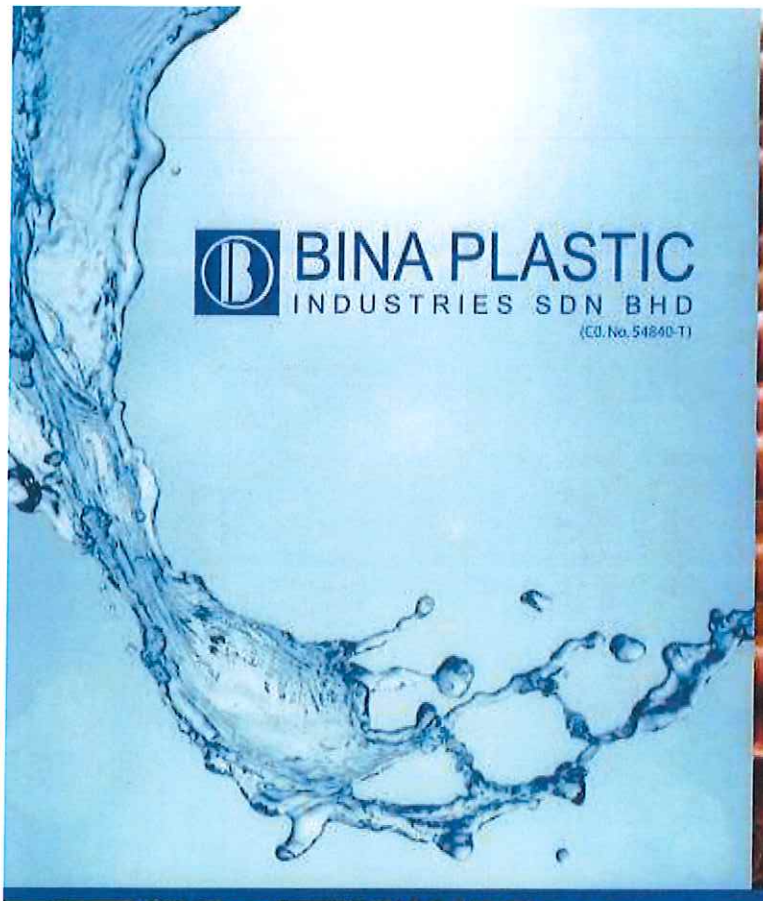
Dipersetujui (*concurred*) [ ]

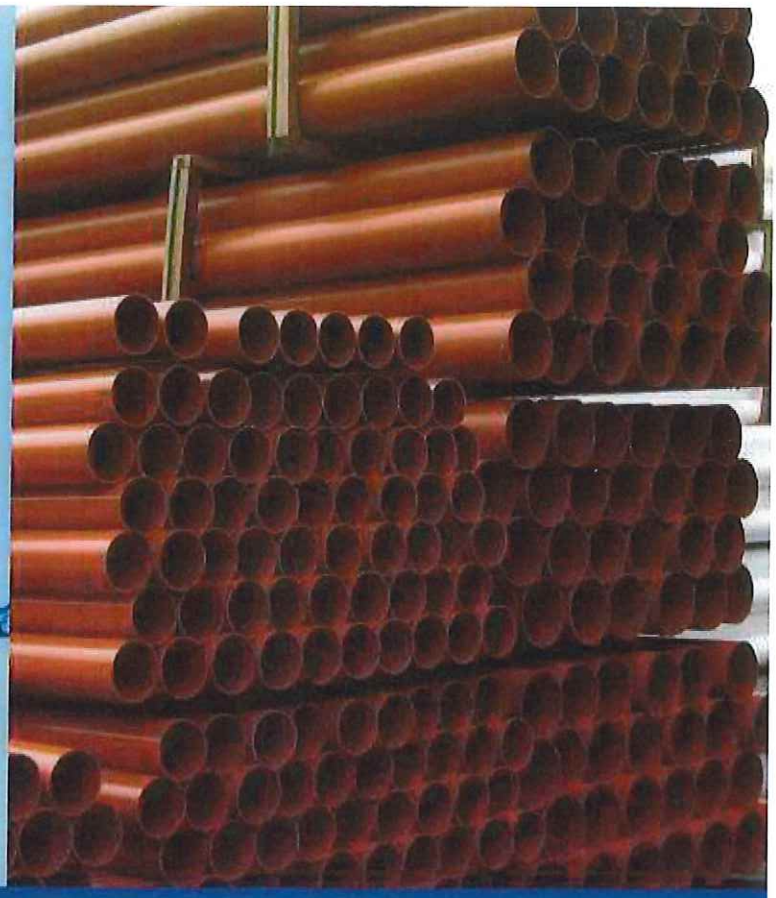
Walaupun perkara di atas telah dipersetujui, adalah menjadi tanggungjawab kontraktor bagi memastikan *bahan/peralatan/mock up/kerja mematuhi kehendak spesifikasi dan berfungsi seperti yang telah dinyatakan di dalam kontrak.

Ditolak dan perlu kemukakan semula [ ]

Tandatangan KUR*(Arkitek/M&E/C&S)/Wakil PP	Jawatan/Cap Rasmi
Nama :	Tarikh

*Nota: Potong mana yang tidak berkenaan.







KKK™

PVC-U PIPES

SOIL, WASTE AND VENTILATING (S.W.V.) SYSTEM

UNDERGROUND DRAINAGE AND SEWERAGE SYSTEM

Fully Compatible with **BBB™ PVC-U Fittings**



AUTHORISED DISTRIBUTOR

TTS PIPES & FITTINGS SDN. BHD.

(Company No: 644930-W)

Registered Office : Lot 62, Sedco Industrial Estate, Kolombong, Mile 5½, Jalan Tuaran, 88450 Kota Kinabalu, Sabah, Malaysia.
Postal Address : P. O. Box 11708, 88818 Kota Kinabalu, Sabah, Malaysia.
Telephone : 088-424960 (4 lines)
Fax : 088-422358
E-mail : admin@ttspipes.com



PVC-U PIPES FOR SOIL, WASTE AND VENTILATING (S.W.V.) SYSTEM

SPECIFICATION

Standard	:	MS 1063 equivalent to SS 213, BS 5255, BS 4514, BS EN 1329
Colour	:	White
Type of Joint	:	Solvent Cement Weld Joint



NOMINAL SIZE		MEAN OUTSIDE DIAMETER (mm)		MINIMUM WALL THICKNESS (mm) Application Area	
In.	mm	Minimum	Maximum	B	BD
1¼	36	36.2	36.5	3.0	-
1½	43	42.8	43.1	3.0	-
2	56	55.8	56.1	3.0	-
3	82	82.4	82.8	3.0	3.0
4	110	110.0	110.3	3.2	3.2
6	160	160.0	160.4	3.2	4.0
8	200	200.0	200.5	3.9	4.9
10	250	250.0	250.5	4.9	6.2
12	315	315.0	315.6	6.2	7.7

Application area code:

Code "B" - Application for components intended for use above ground inside the buildings, or for components outside buildings fixed onto the wall.

Code "BD" - Application for components intended for use above ground for both inside the buildings, or for components outside buildings fixed onto the wall and buried in building structures.

PVC-U PIPES FOR UNDERGROUND DRAINAGE AND SEWERAGE SYSTEM

SPECIFICATION

Standard	:	MS 979 and MS 1063 equivalent to SS 272, BS 4660, BS EN 1329
Colour	:	Brown
Type of Joint	:	Solvent Cement Weld Joint



NOMINAL SIZE		MEAN OUTSIDE DIAMETER (mm)		MINIMUM WALL THICKNESS (mm)
In.	mm	Minimum	Maximum	
4	100	110.0	110.3	3.2
6	155	160.0	160.4	4.1
8	200	200.0	200.5	4.9
10	250	250.0	250.5	6.2
12	315	315.0	315.6	7.7

PVC-U FITTINGS FOR SOIL, WASTE AND VENTILATING (S.W.V.) SYSTEM

45° BEND	Size (mm)
	36
	43
	56
	82
	110
	160
	200
	250
	315

STRAIGHT COUPLING	Size (mm)
	36
	43
	56
	82
	110
	160
	200
	250
	315

PIPE SLEEVE	Size (mm)
	36
	43
	56
	82
	110
	160
	200

45° BRANCH	Size (mm)
	43
	56
	82
	110
	160 x 110
	200

ACCESS PLUG w/ CAP	Size (mm)
	43
	56
	82
	110
	160

BOSS CONNECTOR	Size (mm)
	82 x 56
	110 x 56
	110 x 82
	160 x 82
	160 x 110

88° BEND	Size (mm)
	36
	43
	56
	82
	110
	110 x 82
	160
	200
	250
	315

88° BRANCH	Size (mm)
	36
	43
	56
	82
	82 x 56
	110
	110 x 56
	110 x 82
	160
	160 x 110
	200

CROSS TEE	Size (mm)
	110 x 110
	160 x 110

88° BEND w/ Inspection Opening (I/O)	Size (mm)
	43
	56
	82
	110
	160
	200

88° BRANCH w/ Inspection Opening (I/O)	Size (mm)
	56
	82
	82 x 56
	110
	110 x 56
	110 x 82
	160
	160 x 110

FLOOR GULLY w/ Inspection Opening (I/O)	Size (mm)
	110 x 56 x 56
	110 x 56
	110 x 82

FAUCET (P/T) ELBOW	Size (mm)
	36
	43

FAUCET (P/T) SOCKET	Size (mm)
	36
	43
	56

END CAP	Size (mm)
	56
	82
	110
	160

PVC-U FITTINGS FOR SOIL, WASTE AND VENTILATING (S.W.V.) SYSTEM

VENT COWL	Size (mm)
	56
	82
	110
	160

P-TRAP	Size (mm)
	110

P-TRAP w/ Inspection Opening (I/O)	Size (mm)
	56
	110

S-TRAP	Size (mm)
	110

U-TRAP	Size (mm)
	110

BUSH REDUCER	Size (mm)
	43 x 36
	56 x 36
	56 x 43
	82 x 56
	110 x 56
	110 x 82
	160 x 82
	160 x 110
	200 x 110
	200 x 160

LEVEL INVERT REDUCER	Size (mm)
	82 x 56
	110 x 56
	110 x 82
	200 x 110
	200 x 160

CONCENTRIC REDUCER	Size (mm)
	160 x 110

PVC-U FITTINGS FOR UNDERGROUND DRAINAGE AND SEWERAGE SYSTEM

88° BEND	Size (mm)
	110
	160
	200

88° BRANCH	Size (mm)
	110
	160
	160 X 110

45° BEND	Size (mm)
	110
	160

P-TRAP	Size (mm)
	110

STRAIGHT COUPLING	Size (mm)
	110
	160

Distributed by:

AUTHORISED DISTRIBUTOR