



TACAM STEEL PTE LTD (199401694Z)

541 Bukit Batok Street 23, #07-00 Tacam Industrial Building, Singapore 659546
Tel: (65) 6665 7555 Fax: (65) 6665 9555

Fire Door Asset Management

Draft



Tacam Fire Door Asset Management comprises of the following components:

- i) RFID Tag embedded on the metal door panel
- ii) A printed barcode label on Frame (to sync frame with door)
- iii) An Android based Mobile App
- iv) Local / Cloud based Database

The asset management kit is based on android based mobile app that guides the inspectors, installers to automate fire door reporting and adhere to fire door standards SS332:2018 & SCDF Code of practice.

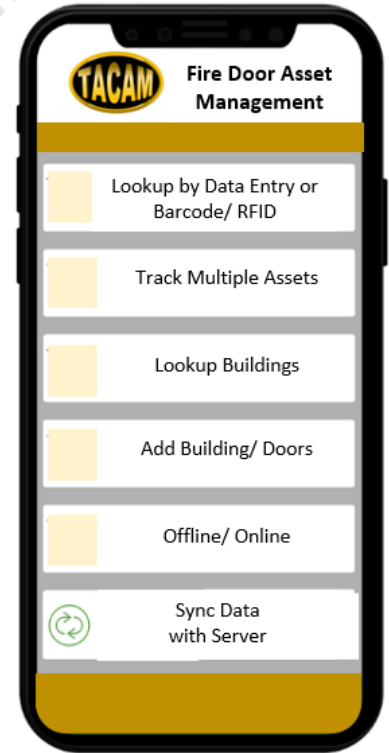


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Main Menu (Proposed)

1. Lookup by Data Entry or Barcode/ RFID
Go into Inspection/ check mode by scanning RFID/ Barcode or key in Door ID
2. Track multiple Assets
Asset tracking mode to collect data (eg: Receiving at incoming store/ at installation site..)
3. Look up Buildings/ Projects
Search for data based on project code
4. Add Projects / Doors
Manual key-in or extract from Door schedule
5. Offline/ Online
6. Sync Data with Server



1. Lookup Mode:

Upon scanning of the RFID tag or Data entry of specific door
Following data should appear for inspection purposes

Door ID		
Client		
Project/ Building Name		
Last Inspection Date		
Year of Manufacture		
Frame ID (optional)		
Room Details:		
Room Number		
Level		
Room Name		
Door Number		
Door Details		
Material		
Finish		
Thickness		
Swing		
Door leaf		



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Active Door Leaf		
Ratings		
Fire Rating (Hrs)		
Fire Label No.		
Pressure Rating (kPa)		
Sound proofing (STC)		
Dimensions		
Door Width		
Door Height		
Frame Width		
Frame Height		
Vision Panel		
Louvre		
Seals		
	1	
	2	
	3	
Ironmongery		
Hinges	Qty	
	Type	
Locking system		
	1	
	2	
	3	
Door closer		
	1	
	2	
Door coordinator		

 Back	 Next	 Validate	 Inspect
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Inspection Mode

FRAME

- ✓ No Loose Frame
- ✓ No damaged Frame
- ✓ No rust through on frames
- ✓ No missing label
- ✓ Frame is in alignment
- ✓ Correct hardware preparation
- ✓ No improper field modification
- ✓ Any comments _____

PANELS

- ✓ No Damaged Panels
- ✓ No rust through on panels
- ✓ No missing label
- ✓ Fire label no. is matching
- ✓ Panel is in alignment
- ✓ No improper add-ons to the panel
- ✓ Correct hardware preparation
- ✓ No improper field modification
- ✓ Any comments _____

HARDWARE

Hinges

- ✓ No missing hinges
- ✓ No loose hinges
- ✓ No missing screws
- ✓ Correct hinges as per database
- ✓ Any comments _____

Door Bolts/ Striker Plates

- ✓ No missing door bolts
- ✓ No missing striker plates
- ✓ Door bolts engage correctly
- ✓ Correct bolts/ striker plates as per database
- ✓ Any comments _____

Locks

- ✓ No missing lock
- ✓ No missing screws
- ✓ No missing or lever(s) or Knob(s)



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-
- ✓ No loose lock components
 - ✓ Correct locks as per database
 - ✓ Others _____

Door Closer

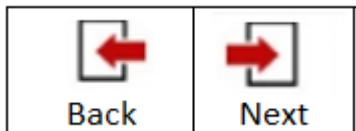
- ✓ No missing door closer
- ✓ No leaking door closer
- ✓ No broken arms
- ✓ No missing screws
- ✓ Correct Door closer as per database
- ✓ Others _____

Others

- ✓ No missing door coordinator
- ✓ No missing astragal
- ✓ No missing kickplate
- ✓ No missing door stops
- ✓ No missing thresholds
- ✓ Others _____

OPERATIONAL TEST

- ✓ Door swings freely
- ✓ Door closes properly
- ✓ Door latch secures properly
- ✓ No rubbing against frame
- ✓ Door closer works effectively
- ✓ Door coordinator functions correctly
- ✓ No improper field modification
- ✓ Any comments _____





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Compliance Result

Yes No

OPERATIONAL TEST

PASSED FAIL/ COMMENTS

FRAME

PASSED FAIL/ COMMENTS

DOOR

PASSED FAIL/ COMMENTS

LOCKS

PASSED FAIL/ COMMENTS

HINGES

PASSED FAIL/ COMMENTS

DOOR BOLTS

PASSED FAIL/ COMMENTS

DOOR CLOSER

PASSED FAIL/ COMMENTS

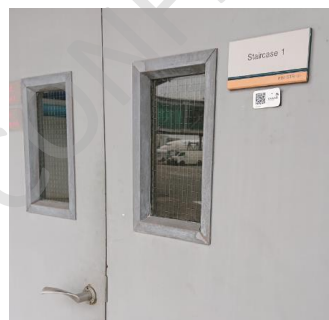
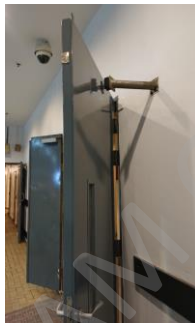
OTHER

HARDWARE

PASSED FAIL/ COMMENTS

COMMENTS

Photos





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2. Track Multiple Assets

To be used possibly by delivery team in factory, incoming store in Singapore, or Site Supervisor.

- Scan all Frames barcodes
- Scan all panels RFID
- Store data and link to Excel database

3. Lookup Buildings/ Projects

- Search for data based on project code
- Link tags/ Barcodes to database

4. Add Projects

Extract data from Door schedule and populate data in the new project

		ROOM DETAILS		DOOR DETAILS														HARDWARE									
OC	SW	Room Number	Level	Room Name	Door number	Gridline Location	Category	Door type	Material	Finish	Thickness	Swing	Active door leaf	Door Leaf	DOOR SWING	Fire Rating (hours)	Pressure Rating (KPa)	Sound proofing (STC)	STC Value used	Air-tightness	Locking hardware set	Number of hinges	Flush Bolts	Door Closer	Floor door wall stop	Others	Room Name & number
OC 001	1	01005	Entrance A	SERVICE CORRIDOR 3	01005-B	BEFORE GRIDLINE E12F15		B8	EG	Primer		OUT	RH	DBL	EDLO	NR	-	-	-	-	EM	10	2(MAN)	1	4		IS3
OC 002	2	01005	Entrance A	COOLING TOWER	01005-A	BEFORE GRIDLINE E12F14	C	B8	EG	Primer		OUT	LH	SGL	SRO	NR	-	-	-	-	EM	8	0	1	2		IS3
OC 003	3	01007	Entrance A	RAIN WATER COLLECTING ROOM	01007-A	ENTRANCE		A8	EG	Primer		OUT	RH	SGL	SLO	NR	-	-	-	-	CL2	8	0	1(P)	2		IS3
OC 004	4	01006	Entrance A	MOBILE GENSET ROOM	01006-A	BEYOND GRIDLINE F12F14		A6	SS	Non-Directional (Block)	1.0	OUT	RH	SGL	SRO	2HRS	-	-	-	-	CL2	10	0	1	2		IS3

5. Offline/ Online Mode

Offline mode enables technician to conduct most of the operations listed above and then upload to server when there is WiFi/network coverage.

6. Sync Data with Server

Synchronising Data with server may be set to periodic when in online mode, and when moving from offline to online mode.



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Revision	Date	Originator	Comments
Draft	03/9/2019	Pradeep Raj	Initial Release
01	15/01/2020	Pradeep Raj	Revised

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