DETAILED COMPARISON MODEL | TRADITIONAL BRICK WALL VS. INSUTILE® SERVICE WALL SYSTEM

INSUTILE® Complete Wall System

A practical commercial and programme comparison based on a standard 100 m^2 wall module

COMPARISON MODULE	BASE ASSUMPTION
Wall Area	100 m^2
Wall Type	Internal, non-load-bearing partition
Wall Height	3.0 m typical planning basis
Comparison End Point	Ready for final finish
Electrical Services	Included in both systems
Openings	Allowed for as a planning factor; actual lintel/opening details depend on design
Traditional Scope	Brick + mortar + storage + masonry + interface treatment + electrical chasing + conduits + repairs + plaster + drying
INSUTILE® Scope	Frame / spacer + planned service cavity + electrical routing + INSUTILE® installation + joint/surface preparation

WHAT IS THE REAL COMPARISON?

✗ WRONG COMPARISON

Price of 1 m^2 of brick

vs.

Price of 1 m^2 of board

✓ CORRECT COMPARISON

Complete Traditional Wall Cost

vs.

Complete INSUTILE® Wall System Cost

TRADITIONAL WALL

8–19 days*

Typical time to ready-for-finish

INSUTILE® SYSTEM

2–4.5 days*

Typical time to ready-for-finish

COMPARISON BASIS

100 m^2 module

Same wall area & services

*Planning estimates only. Actual programme depends on quantities, labour productivity, openings, specifications and site conditions.

01 Step-by-step construction comparison

Every activity is shown so the client can understand where time, labour and cost are actually spent.

STEP	TRADITIONAL BRICK WALL – COMPLETE ACTIVITY	TIME / 100 M²	INSUTILE® SYSTEM – COMPLETE ACTIVITY	TIME / 100 M²	WHAT CHANGES?
1	Receive brick, sand and cement; unload and stock materials.	**0.5–1.0 day**	Receive boards, frame/spacers and fixings; organized storage.	**0.25–0.5 day**	Fewer bulk materials and handling operations.
2	Prepare mortar and execute brick masonry.	**1.0–3.0 days**	Install frame / spacer system.	**0.5–1.0 day**	Dry, system-based installation.
3	Execute door/window openings and lintel details where required.	**0.5–2.0 days**	Coordinate openings within system layout.	**Included / 0.25 day**	Less sequential wet work.
4	Apply wire mesh/interface treatment at brick/concrete transitions where required.	**0.25–0.5 day**	Traditional plaster interface treatment is not repeated in the same way.	**0 day**	Traditional stage reduced/eliminated.
5	Chase / break finished masonry for electrical routes.	**0.5–1.0 day**	Create planned service cavity using spacer/frame.	**Included**	No destructive chasing for planned services.
6	Install conduits, electrical boxes and service routes.	**0.5–1.0 day**	Install conduits, boxes and cables inside service cavity.	**0.25–0.5 day**	Services are planned before closing the wall.
7	Close chases and repair damaged masonry.	**0.5–1.0 day**	No chase repair required for cavity routes.	**0 day**	Repair stage removed.
8	Prepare wall for plaster.	**0.25–0.5 day**	Joint and surface preparation.	**0.25–0.5 day**	More controlled preparation.
9	Apply traditional plaster to full wall surface.	**1.0–2.0 days**	No traditional full-wall plastering.	**0 day**	Major wet-work stage removed.
10	Wait for plaster / wet works to dry before final finishing.	**3.0–7.0 days**	Minimal drying depending on joint/finish materials.	**0.5–1.0 day**	Major programme advantage.
11	Final preparation – ready for paint/finish.	**0.5 day**	Final preparation – ready for paint/finish.	**0.25–0.5 day**	Earlier access to final finish.

CONSTRUCTION LOGIC

TRADITIONAL BRICK WALL

DELIVER → STORE → BUILD → OPENINGS/LINTELS → INTERFACE TREATMENT → CHASE → ELECTRICAL → REPAIR → PLASTER → DRY → FINISH

INSUTILE® SERVICE WALL SYSTEM

INSTALL FRAME/SPACER → CREATE SERVICE CAVITY → RUN SERVICES → INSTALL INSUTILE® → PREPARE JOINTS/SURFACE → FINISH

02 Productivity & programme model

The comparison is based on measurable work packages—not only a general statement that one system is "faster".

A. ESTIMATED PRODUCTIVITY LOGIC FOR A 100 M² WALL MODULE

WORK PACKAGE	TRADITIONAL BRICK WALL	INSUTILE® SYSTEM	PROGRAMME EFFECT
Material handling	Multiple bulk deliveries and internal movement	Fewer system components	Reduced handling
Primary wall installation	Brick masonry: typically spread over several wet-work operations	Frame + spacer + board installation	More direct workflow
Electrical coordination	After masonry; requires chasing	Before wall closure; inside cavity	Reduced rework
Repair works	Close and repair chases	No planned chase repairs	Stage removed
Finishing preparation	Plaster + drying + preparation	Joint/surface preparation	Shorter route to finish
Trade handovers	Masonry → electrical → repair → plaster → finish	Frame → services → board → finish	Fewer handovers

B. PROGRAMME SUMMARY FOR THE 100 M² COMPARISON MODULE

PROGRAMME KPI	TRADITIONAL BRICK WALL	INSUTILE® SYSTEM	ESTIMATED DIFFERENCE
Active construction time	≈ 5–12 working days	≈ 1.5–3.5 working days	**≈ 3.5–8.5 days less active work**
Drying / waiting time	≈ 3–7 days	≈ 0.5–1 day	**Significant reduction in waiting**
TOTAL TO READY-FOR-FINISH	≈ 8–19 days	≈ 2–4.5 days	**Potentially ≈ 60–80% faster***
Trade handovers	4–5 major handovers	3–4 controlled stages	**Simpler coordination**
Destructive work after wall construction	Yes – electrical chasing	No – planned cavity routing	**Reduced rework and repairs**

*Estimated planning model, not a contractual programme. Productivity must be validated on the actual project.

03 Complete cost breakdown model

This is the cost structure that should be priced in Egypt—not simply "brick price versus INSUTILE® board price".

A. TRADITIONAL BRICK WALL – WHERE THE MONEY GOES

COST PACKAGE	WHAT MUST BE INCLUDED IN THE RATE
1. Material supply	Brick, sand, cement and mortar materials
2. Delivery & logistics	Transport, unloading and internal movement
3. Site storage	Storage area, handling and material management
4. Masonry labour	Brick laying, alignment and supervision
5. Openings / lintels	Allowances where required by drawings/design
6. Interface treatment	Wire mesh and treatment where required
7. Electrical chasing	Breaking/chasing masonry for conduits and boxes
8. Electrical repair	Closing chases and making good
9. Plastering	Full traditional plastering scope
10. Programme cost	Drying/waiting effect and delayed finishing access
11. Waste removal	Brick cuts, mortar waste and demolition/chasing waste

B. INSUTILE® WALL SYSTEM – WHERE THE MONEY GOES

COST PACKAGE	WHAT MUST BE INCLUDED IN THE RATE
1. INSUTILE® boards	Complete board quantity including approved wastage allowance
2. Frame / spacer	System support and cavity creation components
3. Fixing system	Approved fasteners and accessories
4. Installation labour	Frame/spacer and board installation
5. Service coordination	Electrical conduits/boxes routed inside the cavity
6. Joint treatment	System joint and surface preparation
7. Final preparation	Ready-for-finish preparation according to specification
8. Logistics & waste	Delivery, handling and controlled installation waste

COMMERCIAL FORMULA

TRADITIONAL COMPLETE WALL COST

Materials + Delivery + Storage + Masonry Labour + Openings/Lintels + Mesh + Chasing + Electrical Repairs + Plaster + Drying/Programme + Waste

INSUTILE® COMPLETE WALL COST

Boards + Frame/Spacer + Fixings + Installation + Service Coordination + Joint/Surface Preparation + Logistics/Waste

04 Client decision matrix

A simple scorecard that makes the technical and commercial difference immediately understandable.

DECISION CRITERIA	TRADITIONAL BRICK WALL	INSUTILE® SYSTEM	WHY IT MATTERS
Installation speed	Slower / multi-stage	**Faster / direct sequence**	Programme and earlier handover
Electrical routing	Chase after wall construction	**Planned cavity before closure**	Less damage and repair
Wet works	High	**Limited**	Less drying dependency
Site storage	High bulk storage requirement	**More compact system storage**	Cleaner site logistics
Trade coordination	Several sequential trades	**Fewer sequential stages**	Lower coordination complexity
Repairs after services	Required after chasing	**Reduced for planned routes**	Less rework
Waste	Higher	**Generally lower**	Cleaner site and less removal
Access to final finish	After plaster and drying	**After system preparation**	Earlier finishing access
Correct commercial comparison	Often reduced to material price	**Complete system evaluation**	Better value-engineering decision

SUMMARY

The difference is the construction sequence, not only the material.

The INSUTILE® system forms the service cavity first, so electrical services are coordinated inside it before the wall is closed. The traditional sequence of **build → chase → repair → plaster → dry** therefore does not apply, which is where the programme and cost differences in this model come from.

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