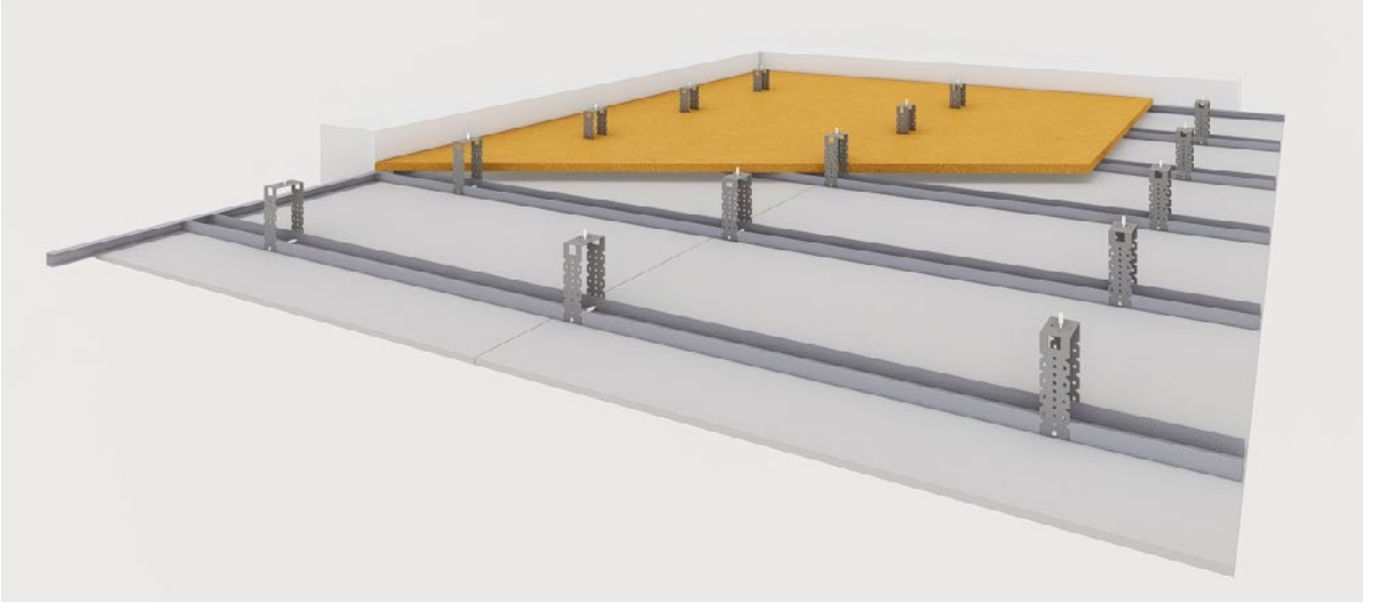


SINGLE FRAME SUSPENDED CEILING SYSTEM WITH DIRECT FIXING BRACKETS



A suspended ceiling system consisting of Intreme/Intreme Fit Ultralight plasterboards mechanically fixed to a single layer metal framework. The framework is suspended from the structural slab using brackets.

FEATURES

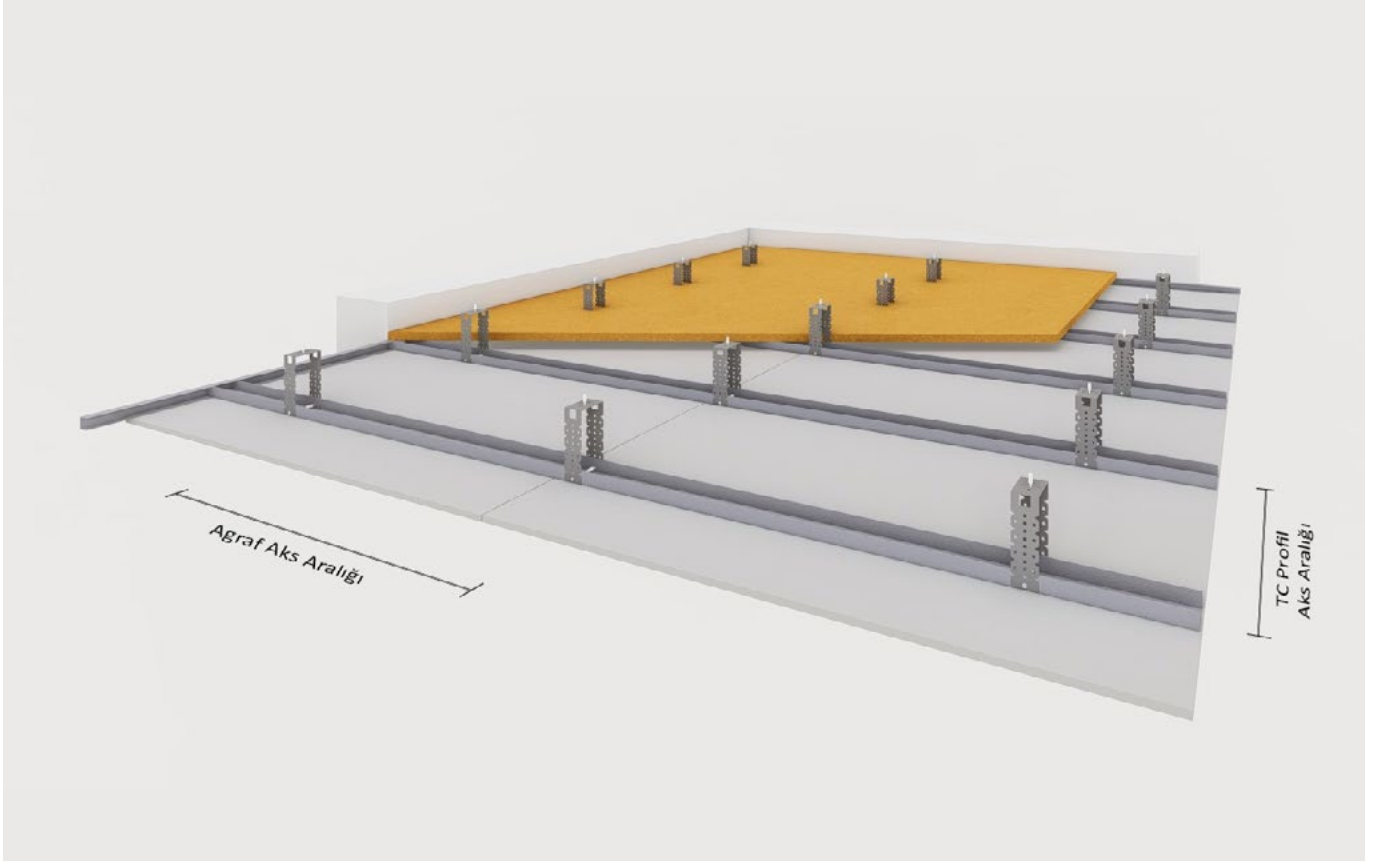
- Provides increased finishing ceiling height in areas with limited structural ceiling height.
- Allows for a lightweight and flexible ceiling system compatible with structural movements.
- Enables the installations of mechanical, electrical and plumbing services within the ceiling void, with access for maintenance.
- Allows the use of insulation materials, ensuring high acoustic and thermal performance.
- Achieves high fire resistance when used with appropriate plasterboard types.

USAGE AREAS

- Residential Buildings
- Cafes and Restaurants
- Business and Shopping Centers
- Office Buildings
- Hotels
- Hospitals
- Cinemas, Theaters and Sports Halls
- Renovation projects

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■ APPLICATION



- The suspended ceiling level shall be determined according to the approved architectural drawings.
- The positions of TU (Ceiling U) profiles shall be marked on wall surfaces.
- TU profiles shall be cut and prepared in accordance with project dimensions.
- TU profiles are fixed to the walls using appropriate anchors and screws at 600 mm centres.
- The layout of main carrier TC (Ceiling C) profiles shall be marked on the slab.
- The distance between the wall and the first /last main carrier profile shall not exceed 300 mm.
- Brackets shall be fixed to the slab using steel anchors at a maximum spacing of 1100 mm centre to centre spacing.
- The distance of the steel dowel from the first and last wall along the reference line shall not exceed 25 cm.
- In hollow block slabs, steel dowels are fixed to the ribbed beams located between the hollow blocks.
- After the brackets are fixed to the ceiling surface, the main carrier TC profile is placed onto the TU profile and secured to the brackets from both sides using bracket screws.
- Any excess length of the brackets extending beyond the main carrier TC profile shall be bent and aligned with the level of the main carrier TC profile.

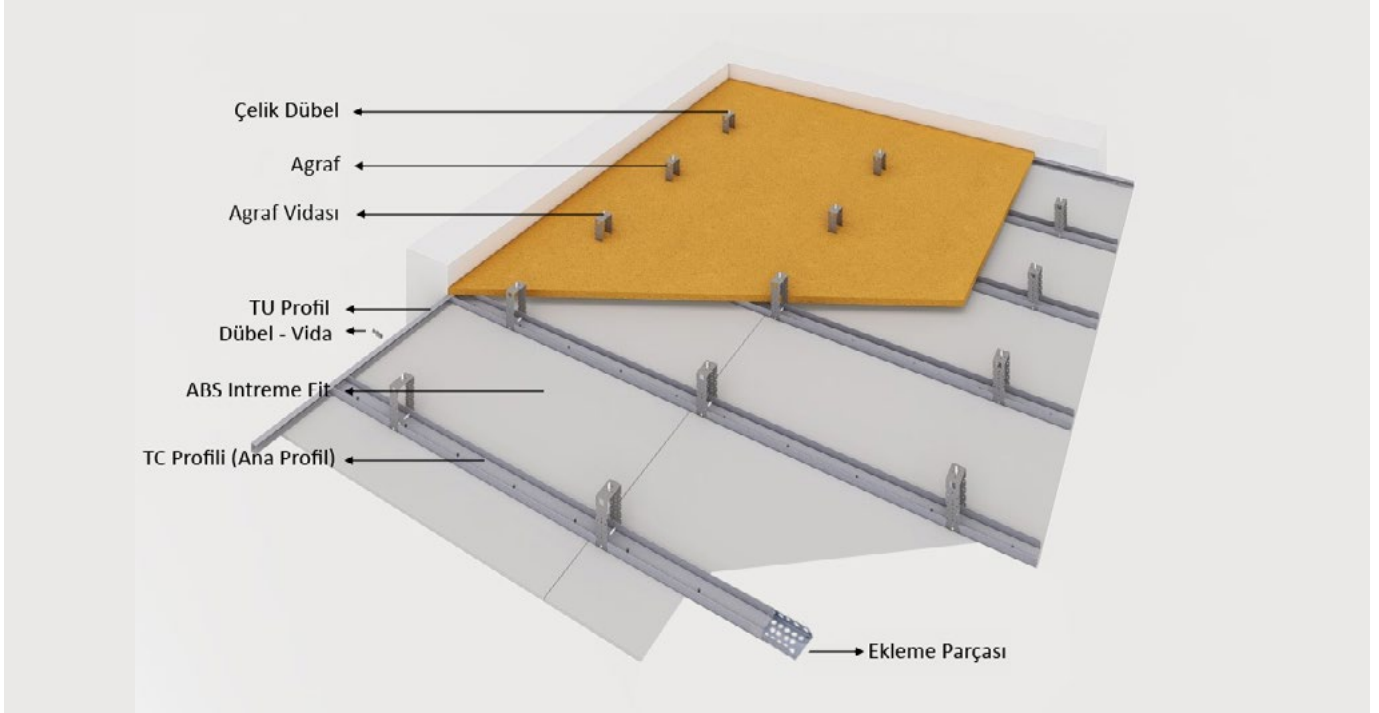
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■ UYGULAMA

- Connectors (inserts) are used at the joints of TC profiles.
- If the long side of the Intreme Fit Ultralight plasterboard is perpendicular to the secondary carrier TC profiles, the spacing of the secondary carriers shall be a maximum of 50 cm centre- to- centre, If parallel, the spacing shall be a maximum of 40 cm centre- to- centre.
- Before starting plasterboard installation, all services within the suspended ceiling (electrical, plumbing, acoustic, HVAC, ventilation, and fire protection) shall be completed.
- If insulation materials are used, they shall be placed on the TC profiles.
- Plasterboards are cut using a utility knife and a straightedge.
- The blade of the utility knife shall cut through the front paper layer and penetrate into the core.
- The plasterboard shall then be snapped by applying hand pressure along the cut line, with the cut face upward.
- The board shall be turned over and the back paper shall be cut using a utility knife.
- Chamfers shall be formed on cut edges at an angle of approximately 45 degrees using appropriate tools.
- The plasterboard shall be positioned close to the wall and installation shall begin. Boards shall be aligned with the centerline of the TC profiles.
- Screws shall penetrate the metal profile by at least 10 mm beyond the plasterboard thickness.
- Screws shall be fixed at a distance of 10-15 mm from the board edges. Screw heads shall be flush with the surface and shall not damage the paper layer.
- Plasterboards shall be installed tightly at the joints without gaps.
- End joints of adjacent boards shall be staggered by at least 40 cm and shall not be on the same line.
- Plasterboards shall be fixed to the secondary carrier TC profiles using drywall screws at a maximum spacing of 30 cm centre – to- centre (for single layer applications).
- Gaps wider than 5 mm are pre-filled with ABS Joint Filler for Plasterboard.
- Protruding screw heads shall be checked, tightened until flush with the surface, then covered with joint filling plaster.
- Self-adhesive fiberglass joint tape shall be applied centrally along the joints.
- The first coat of ABS Joint Filler for Plasterboard is applied generously over the tape, (approximately 10 cm wide), ensuring full contact smoothed using a steel trowel.
- After a minimum of 2 hours, a second coat of ABS Joint Filler for Plasterboard is applied with a steel trowel, extending to a width of approximately 20 cm.

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MATERIAL ANALYSIS



SINGLE FRAME SUSPENDED CEILING SYSTEM WITH DIRECT FIXING BRACKETS

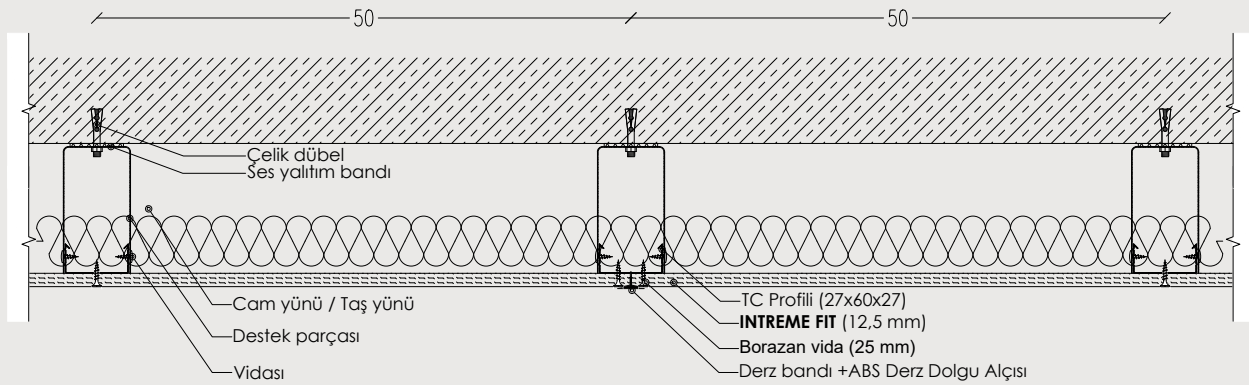
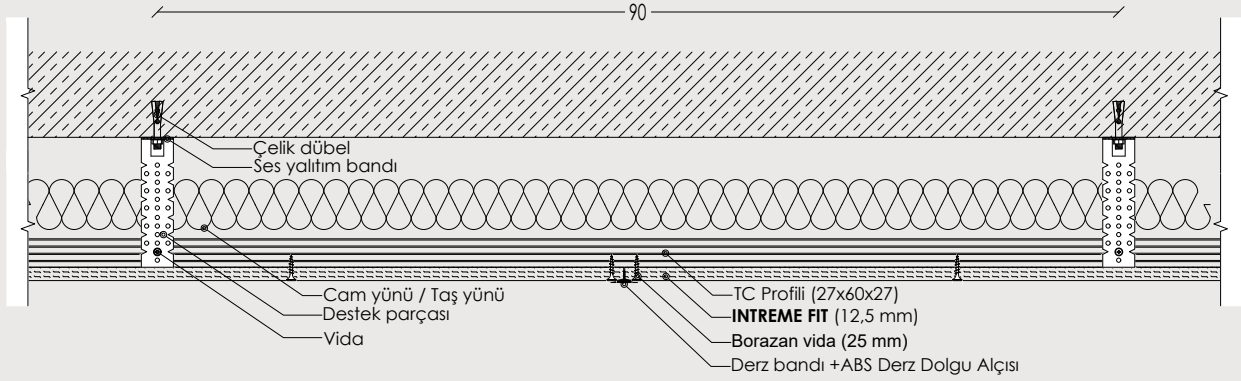
MATERIAL ANALYSIS

For 1 m² of suspended ceiling, 5% wastage is taken into account.
Quantities are approximate and may vary depending on project details.

Material Name		Single Layer Plasterboard	Double Layer Plasterboard
Intreme/Intreme Fit Ultralight		1,05 m ²	2,10 m ²
TU Profile		0,90 m	
TC Profile	If the secondary carrier TC profile is perpendicular to the long side of the plasterboard	2,00 m	
	If the secondary carrier TC profile is parallel to the long side of the plasterboard	2,50 m	
Extension piece		1 pcs	
Dowel-Screw		1 pcs	
Steel Dowel		2 pcs	
Bracketed		2 pcs	
Bracketed Screw		4 pcs	
Clip		5 pcs	
Drywall Screw 3,5x25		16 pcs	16 pcs
Drywall Screw 3,5x38			16 pcs
Joint Tape		1,80 m	
ABS Joint Filler for Plasterboard		0,40 kg	
ABS Saten Finishing Plaster		1 kg/m ² for every 1 mm thickness	
Insulation Material (Optional)		1,05 m ²	
Perforated corner profile corner tape		Varies Depending on Ceiling Detail	

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DETAIL DRAWINGS



SINGLE FRAME SUSPENDED CEILING SYSTEM WITH DIRECT FIXING BRACKETS

■ SPECIFICATION

Carry out the works in accordance with the approved project drawings and detail specifications; Ceiling U-profiles (TU) and Ceiling C-profiles (TC) shall be prepared from galvanized steel in accordance with TS EN 14195; TU profiles shall be fixed to the existing walls using plastic plugs and screws at 600 mm centres The first main carrier line shall be marked on the ceiling at a distance of 10 cm from the existing wall; Mark subsequent carrier lines at 500mm intervals (maximum 600 mm centres) Install suspension brackets along the marked lines using steel anchors at maximum 1100 mm centres; Adjust bracket wings to achieve the required suspended ceiling level; Cutting TC profiles; Cut C profiles (TC) to required lengths and position them between bracket wings; Secure and level the profiles by fixing them to the brackets with appropriate screws; Provide connectors (inserts) at profile joints where required; Fix Intreme/Intreme Fit Ultralight plasterboards to the metal framework using 25 mm drywall screws (in accordance with TS EN 520) at maximum 300 mm centres Pre-fill joints wider than 5 mm with ABS Plasterboard Joint Filler Plaster; Apply C joint filler plaster over screw heads; Apply self-adhesive fiberglass joint tape over all plasterboard joints; The unit rate per m² shall include all materials, material waste, labour, loading at site, horizontal and vertical transportation, unloading, contractor's overheads and profit, and all other costs associated with constructing the partition wall, including the application of joint filler over the joint tape.

WARNINGS

- Use corner breads or joint tape to ensure proper alignment and smoothness at corners.
- Apply joint tape and joint filler plaster at all plasterboard joints.
- Do not use plastic anchors for load- bearing ceiling suspension elements, only approved steel anchors shall be used due to risk of failure.
- Ensure all additional loads are supported by the existing structural system, not by the suspended ceiling.

STANDARDS

- TS EN 520 Plasterboards - Definitions, Requirements and Test Methods
- TS EN 13963 Joint Materials - For Plasterboards - Recipes, Requirements and Test Methods
- TS EN 14195 Metal Frame Components Used in Plasterboard Systems
- TS 1475-3 Gypsum plasterboard applications - Part 3: Suspended ceiling application rules
- TS 1475-4 Gypsum plasterboard applications - Part 4: Finishing works application rules