Model an L-shaped kitchen with dining table, cabinets, and appliances

Software: SketchUp

Task statement

Build a 3D model of an L-shaped kitchen with a dining area, working in millimetres. Use the supplied dimensioned diagrams as the layout and dimension reference: diagram_01.png (sheet A-201 with top, front, right side and isometric views) and its enlargements diagram_01_detail01.png to diagram_01_detail04.png.

Overall size: the room footprint measures 5439.9 mm wide (front view) by 3846 mm deep (top view). Overall height, including the floor slab, is 2292.4 mm.

Shell:

- A floor slab.
- Two walls: one along the back and one along the right-hand side. The front and left sides stay open, as shown in the isometric view.
- A door at the left end of the back wall.
- A two-pane window centred over the sink run on the back wall.

Kitchen:

- An L-shaped run of base cabinets with a continuous countertop. One leg runs along the back wall and the other along the right wall. Show drawer and door fronts as drawn.
- In the back run, set a double-bowl sink with a faucet beneath the window.
- In the right-hand run, place a four-burner hob, with a built-in oven in the base unit below it.
- Behind the countertop, fit vertical slatted backsplash panels on both sides of the window and along the right wall.
- Add upper and tall cabinets on the right wall, as shown in the right side view.
- Include the countertop accessories shown: a dish drying rack, a wall-mounted knife rail with knives, and bottles.

Dining area:

- A rectangular dining table in the open floor area.
- Six chairs: two on each long side and one at each end.
- Six place settings on the table.

Model organisation:

- Make each cabinet, appliance, fixture and furniture piece its own group or component.
- Repeated items, such as the chairs and plates, should be instances of a shared component definition.
- Organise the model with tags, for example walls, floor, cabinets, appliances, furniture and accessories.
- Apply materials to distinguish surfaces such as countertops, cabinet fronts, walls, floor and metal fixtures.

The model should allow top, front, right side and isometric views matching the supplied sheet.

Rubrics

- **R1:** The model shall have an overall plan extent of approximately 5439.9 mm by 3846 mm.
- **R2:** The model shall have an overall height of approximately 2292.4 mm including the floor slab.
- **R3:** The model shall include a floor slab with walls along the back and right-hand sides only, leaving the

front and left sides open.

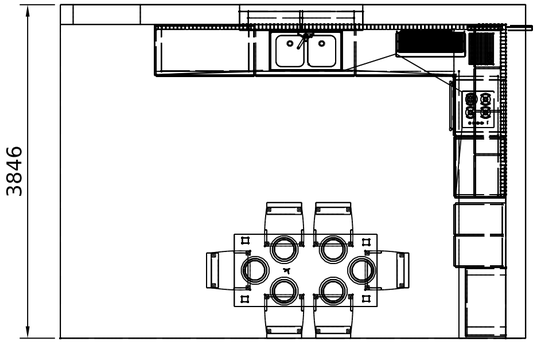
- **R4:** The model shall include a door at the left end of the back wall.
- **R5:** The model shall include an L-shaped run of base cabinets with a continuous countertop along the back wall and the right wall.
- **R6:** The model shall include a double-bowl sink with a faucet set in the back countertop run.
- **R7:** The model shall include a two-pane window in the back wall located above the sink.
- **R8:** The model shall include a four-burner hob in the right-hand countertop run.
- **R9:** The model shall include a built-in oven in the base unit below the hob.
- **R10:** The model shall include vertical slatted backsplash panels behind the countertop on both sides of the window.
- **R11:** The model shall include upper or tall cabinets on the right wall above the counter level.
- **R12:** The model shall include a rectangular dining table with six chairs, two per long side and one at each end.
- **R13:** The model shall include six place settings on the dining table.
- **R14:** The model shall include a dish drying rack and a wall-mounted knife rail on the countertop zone.
- **R15:** The model shall use millimetres as its length units.
- **R16:** The model shall represent the cabinets, appliances and furniture as separate groups or components, with the six chairs as instances of a shared component definition.
- **R17:** The model shall organise its geometry using multiple tags.
- **R18:** The model shall apply materials to distinguish countertops, cabinet fronts, walls and floor.

Input files

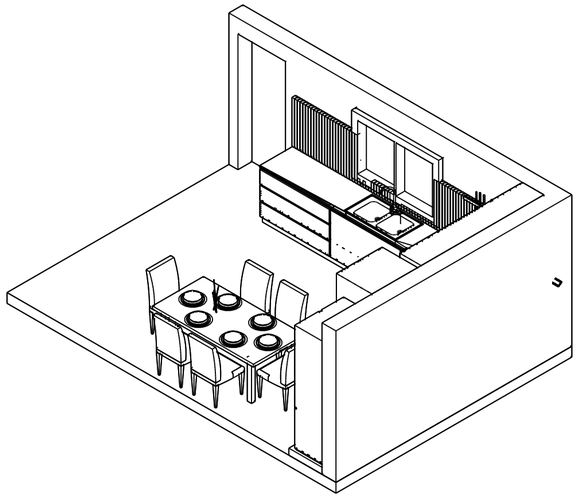
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Deliverables

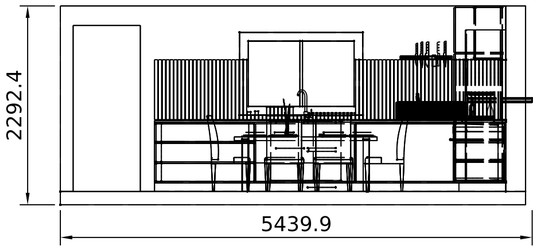
- **.skp:** output_files/project_files/KITCHEN2.skp: A single SketchUp file (KITCHEN2.skp) containing the componentised, tagged and materialised 3D model of the L-shaped kitchen, its two walls and floor slab, and the six-seat dining set.



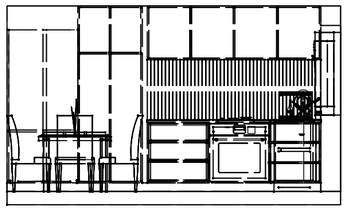
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW



RIGHT SIDE VIEW

DRAWING TITLE

L-SHAPED KITCHEN WITH DINING TABLE, CABINETS, AND APPLIANCES

GENERAL NOTES

1. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED.
2. DO NOT SCALE; USE FIGURED DIMENSIONS.

GRAPHIC SCALE

0 1 m 2 m

UNITS

MILLIMETRES

SCALE

1:50

SIZE

A2

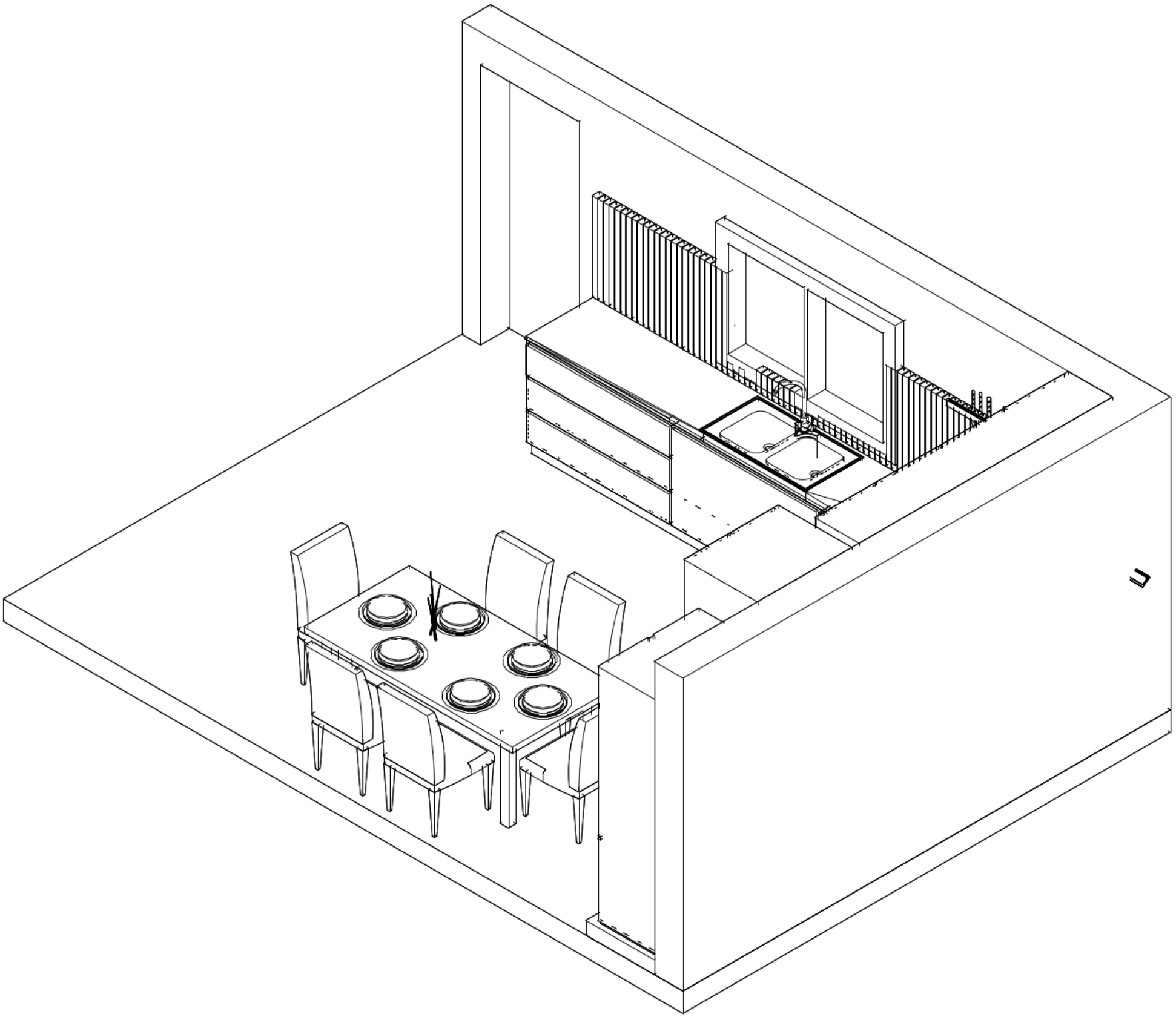
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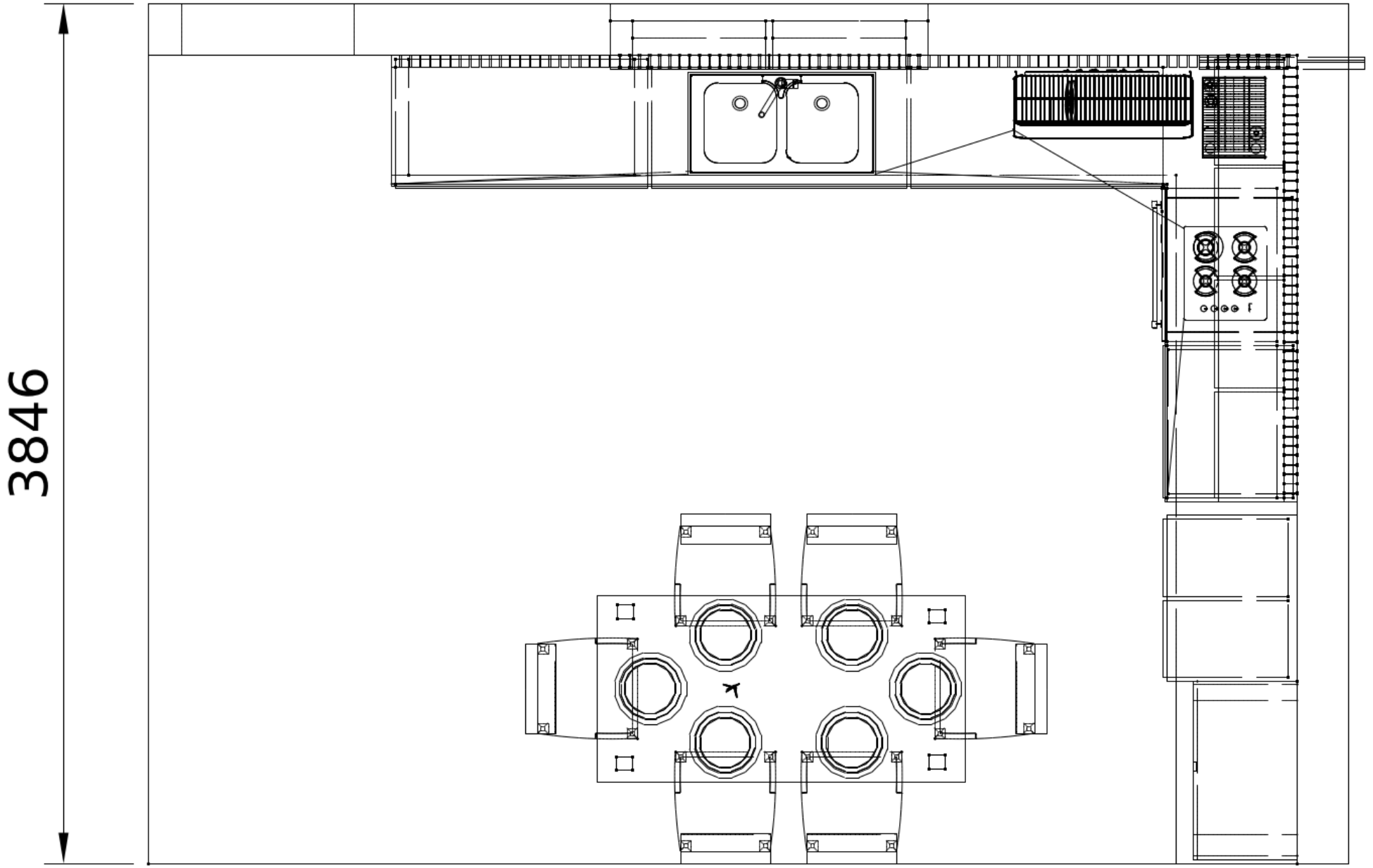
SHEET

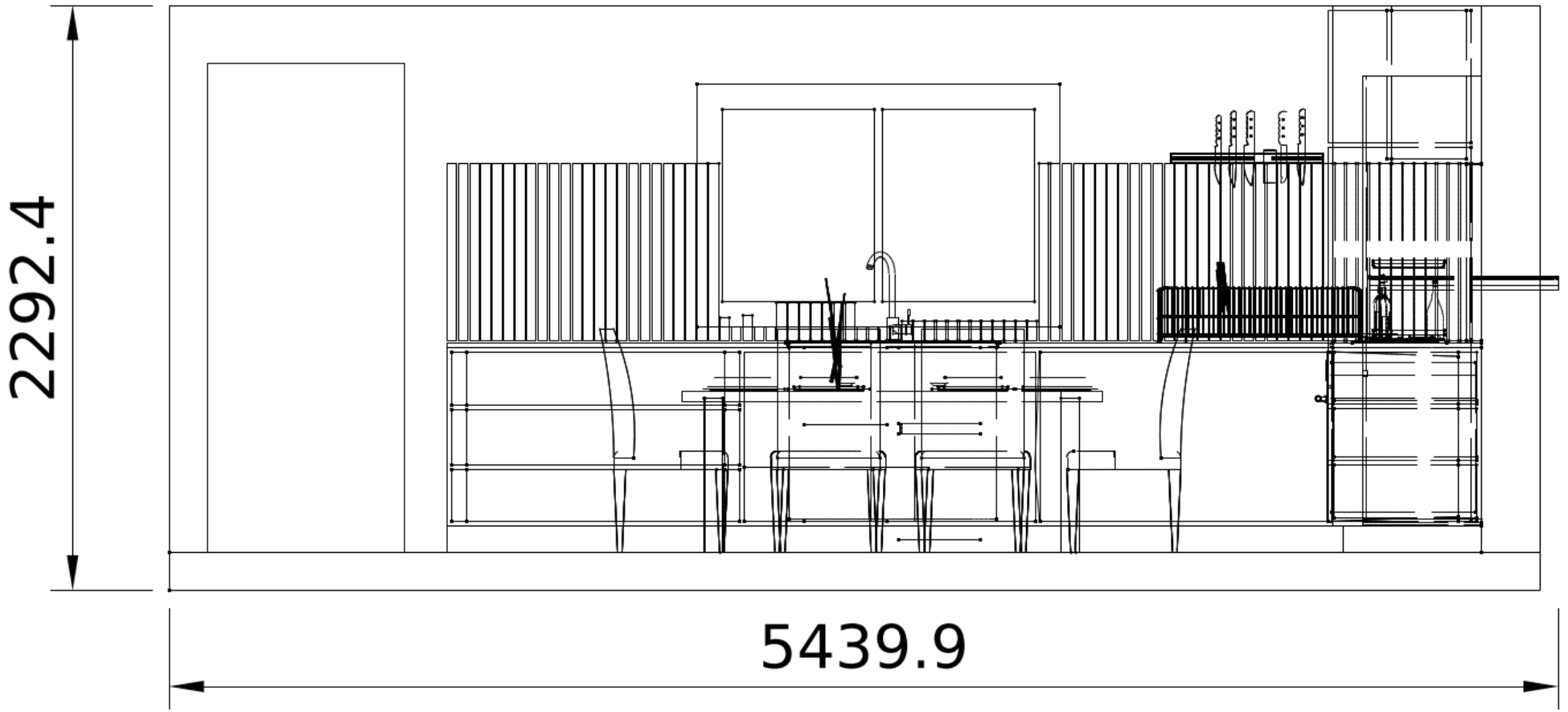
A-201

1 OF 1

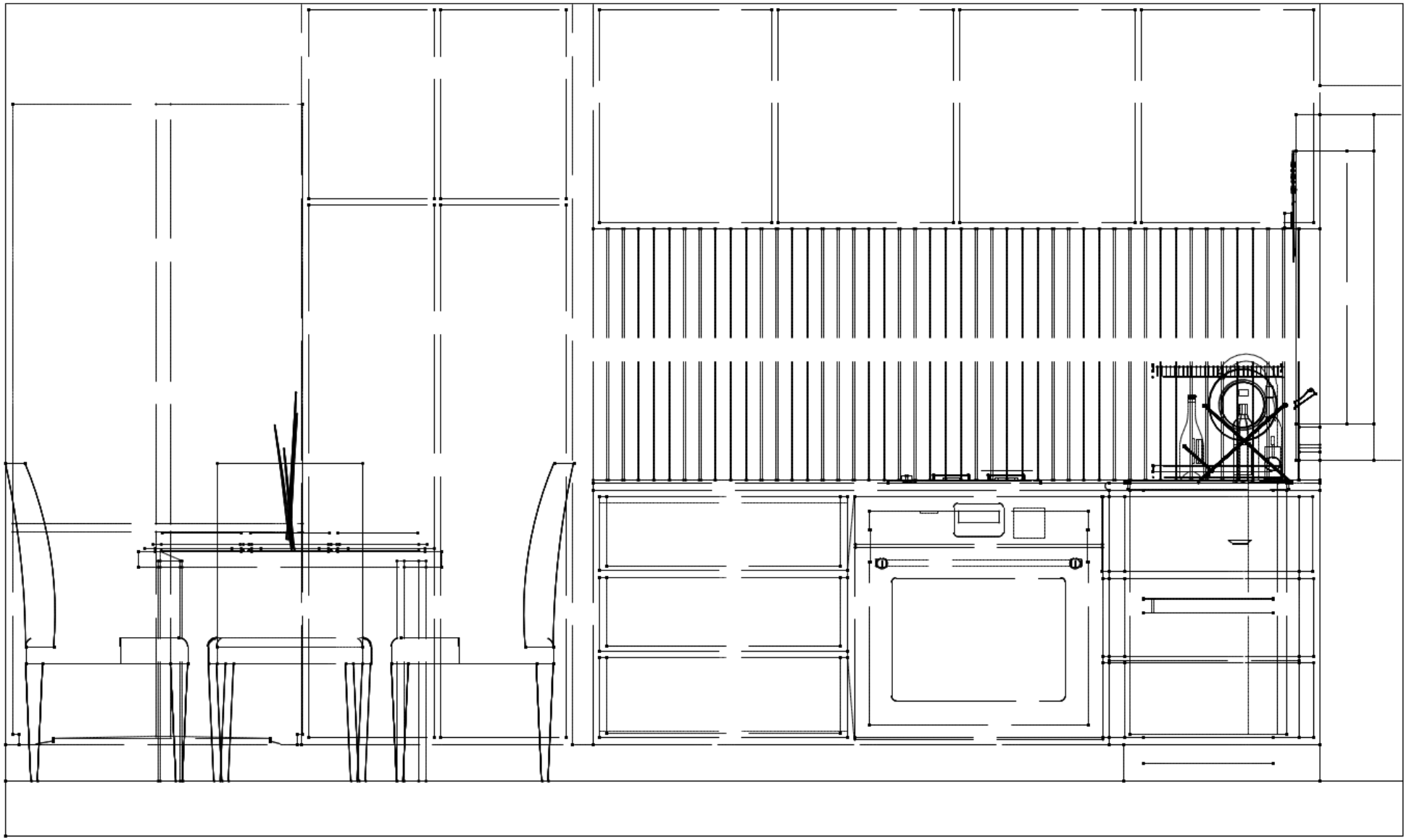


ISOMETRIC VIEW


3846



FRONT VIEW



DETAIL 4 · VIEW 4 · SHEET ZONES F6-G8