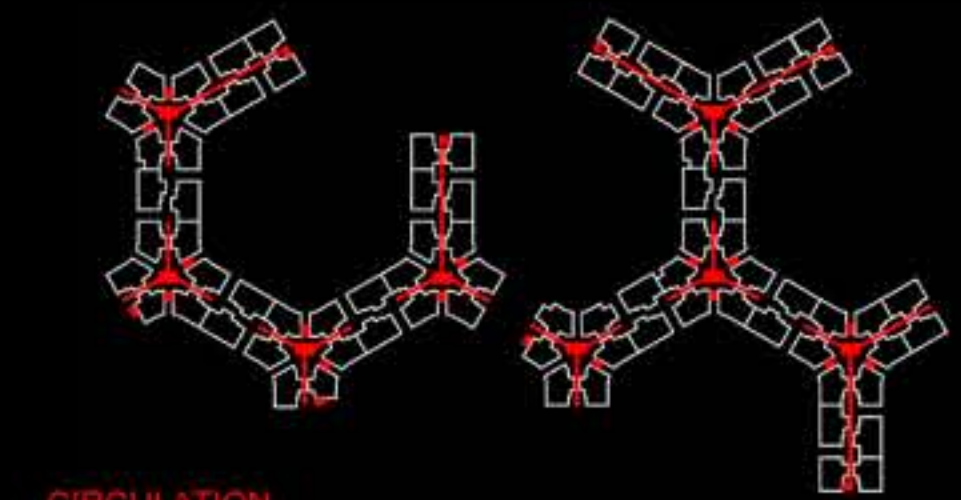
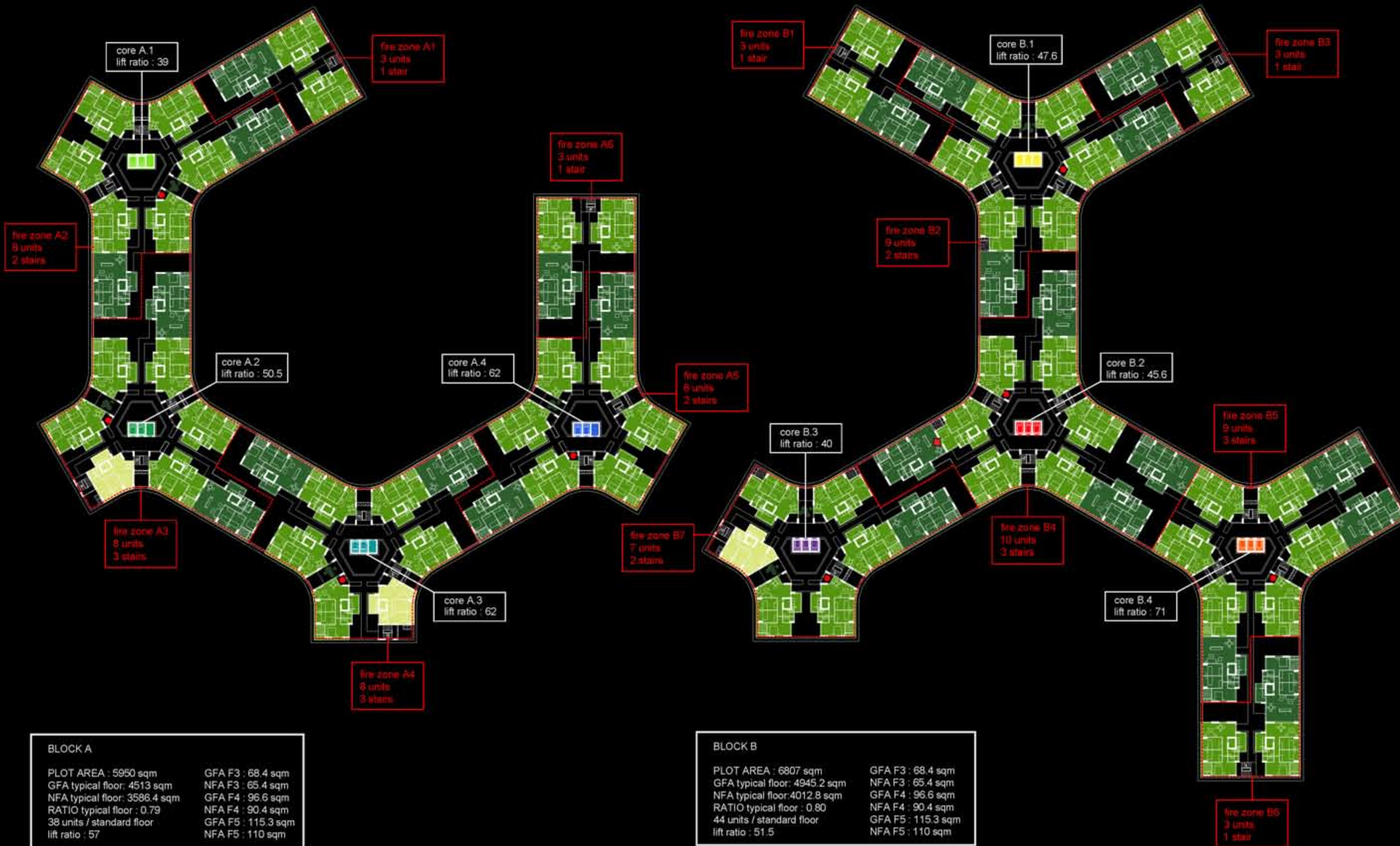
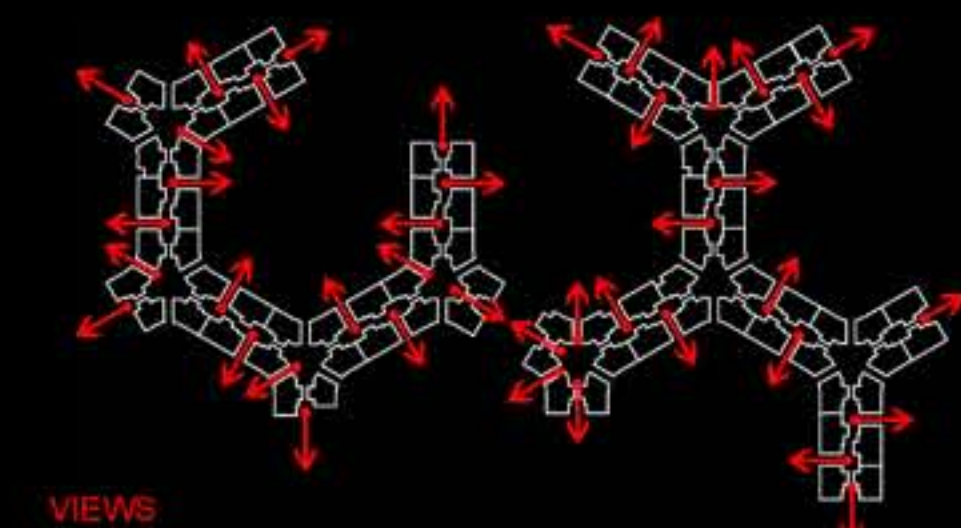


PUNGGOL WATERFRONT HOUSING DESIGN_TERRACES ON THE WATER

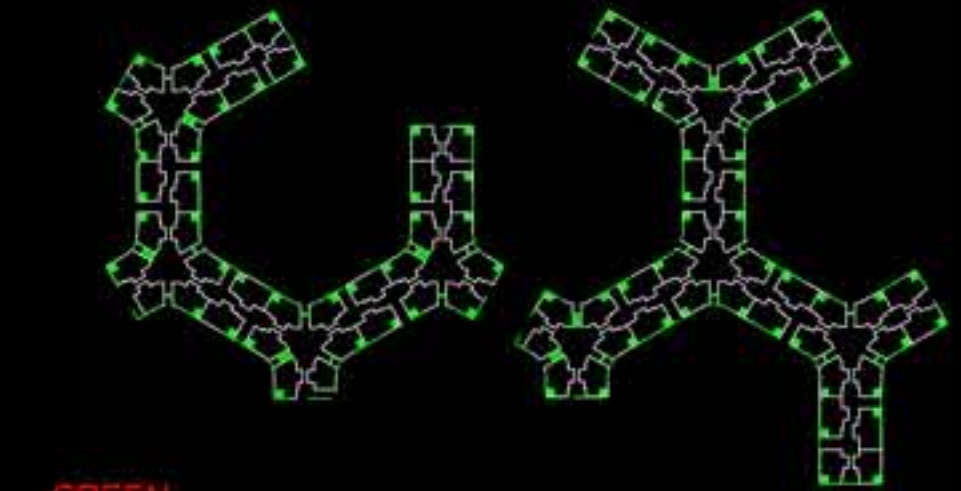
PGH334E



CIRCULATION

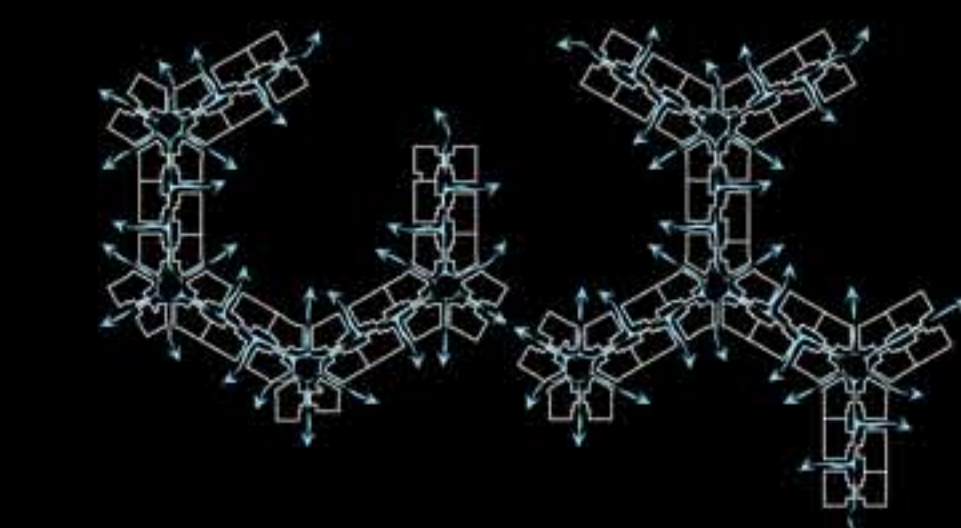


VIEWS



GREEN

NATURAL VENTILATION AND LIGHTING
 To minimize building energy use, passive environmental design principles are applied throughout the project. Large horizontal and vertical exterior openings are carefully positioned to provide natural ventilation and maximise natural lighting to the public areas of the building. These openings are integrated into the building form to allow the parking level, public lobbies and corridors to be passively ventilated and illuminated without placing them on the exterior of the building. Stairs are located at the building exterior but are open in design to allow ventilation and light to penetrate to the interior spaces behind. A computational fluid dynamics model will be created during the detail design process to assess the natural ventilation adequacy of each apartment. Exterior, car park and public area lighting systems are selectively placed on daylight and motion sensor controls to switch high efficiency fluorescent lighting only when natural daylight levels are insufficient.



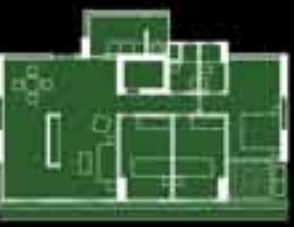
NATURAL VENTILATIONS

BLOCK A

PLOT AREA : 5950 sqm	GFA F3 : 68.4 sqm
GFA typical floor: 4513 sqm	NFA F3 : 65.4 sqm
NFA typical floor: 3586.4 sqm	GFA F4 : 96.6 sqm
RATIO typical floor : 0.79	NFA F4 : 90.4 sqm
38 units / standard floor	GFA F5 : 115.3 sqm
lift ratio : 57	NFA F5 : 110 sqm

BLOCK B

PLOT AREA : 6807 sqm	GFA F3 : 68.4 sqm
GFA typical floor: 4945.2 sqm	NFA F3 : 65.4 sqm
NFA typical floor: 4012.8 sqm	GFA F4 : 96.6 sqm
RATIO typical floor : 0.80	NFA F4 : 90.4 sqm
44 units / standard floor	GFA F5 : 115.3 sqm
lift ratio : 51.5	NFA F5 : 110 sqm



TYPE F5, 3 BEDROOMS
 GFA 115sqm NFA 110sqm



TYPE F4, 3 BEDROOMS
 GFA 96sqm NFA 90sqm



TYPE F3, 2 BEDROOMS
 GFA 68sqm NFA 65sqm