



green office



corporate vision
project development
physical environment & structure
energy management
resource management
material management
quality of life
innovation



popular green



media publicity
energy economy supply & demand
ecopreneurist



project development

agenda for design, construction, marketing and operation;

**sustainable building
energy efficiency**

selection of standards

selection of technology

initial investment cost

operation cost

prestige&brand

management

site selection



happy building
green building

sustainability; recent marketing strategy

project development

site selection - LEVENT; proximity to transportation, urban centres, existing infrastructures / protection of green lands&river basins

■ SSc2. Development Density & Community Connectivity



Levent Office Building is located close to office towers, shopping centers and residential areas.

Leed SSC.2. Credit requires that there should be a residential region which has at least 10 houses per acre (app. 4000 m²) within 1/2 mile (app. 800 m) radius. In addition, there should be at least 10 accommodation units within 1/2 mile (app. 800 m) radius that are listed below:

- . Bank
- . Residence. Library
- . Coiffeur
- . School
- . Mosque
- . Social Areas
- . Health Care Center
- . Laundry
- . Office Building
- . Restaurant
- . Parc
- . Pharmacy
- . Dry Cleaner
- . Supermarket
- . Fire Station

Attachments that will be added to this narrative :

- Info. about Kanyon
- Info. about Metro City
- Info. about Tekfen Tower
- Info about Loft

A Building Site **D** Tekfen Tower (Office Tower)

B Kanyon **E** Metro City

C Residence (Loft) **■** Building Site **■** Residential Area

Distance from A to B: 150 m

Distance from A to C: 140 m

Distance from A to D: 345 m

Distance from A to E: 670 m

Distance from A to residential area: 270 m

physical environment&structure

**g
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design**



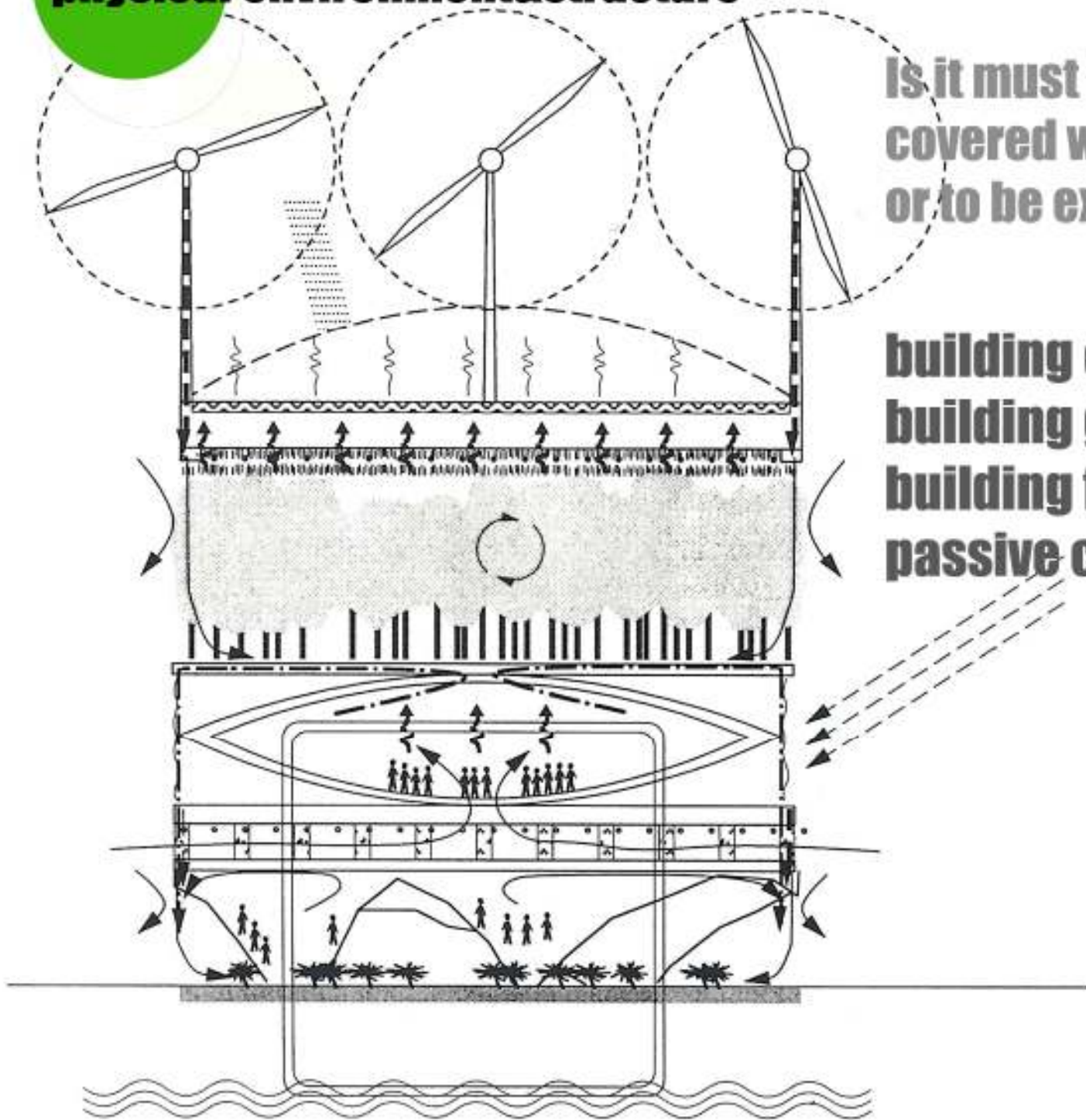
physical environment&structure



physical environment&structure

Is it must for a green building to be covered with green or to be extremely hightech?

building orientation
building geometry
building facade
passive climatization



physical environment & structure



Figure 5: DesignBuilder 3-D Model of the Building (180° Degree)

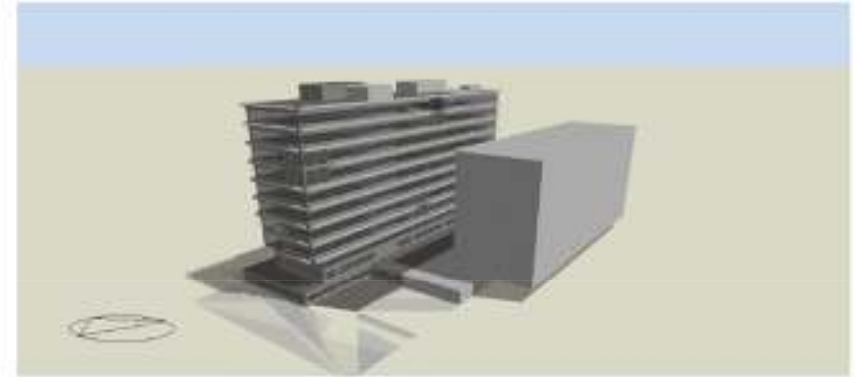


Figure 3: DesignBuilder 3-D Model of the Building (0° Degree)



Figure 6: DesignBuilder 3-D Model of the Building (270° Degree)

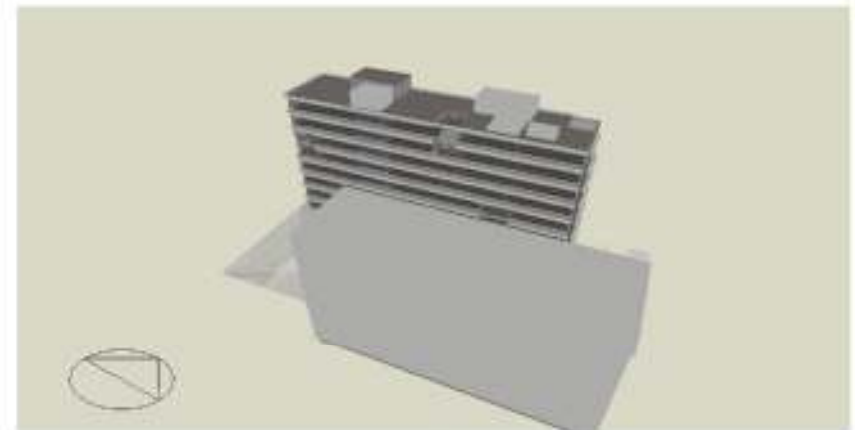


Figure 4: DesignBuilder 3-D Model of the Building (90° Degree)

orientation *LEVENT*

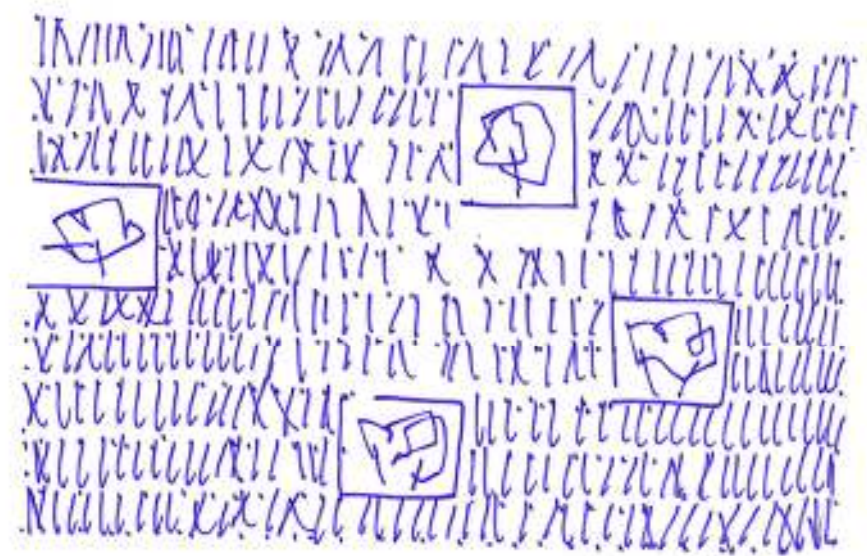
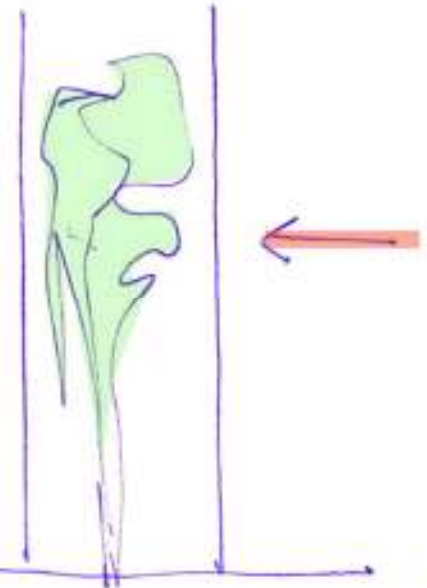
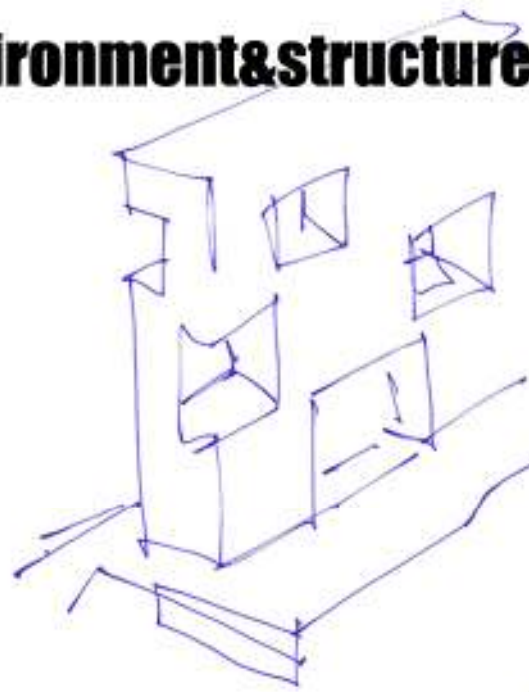
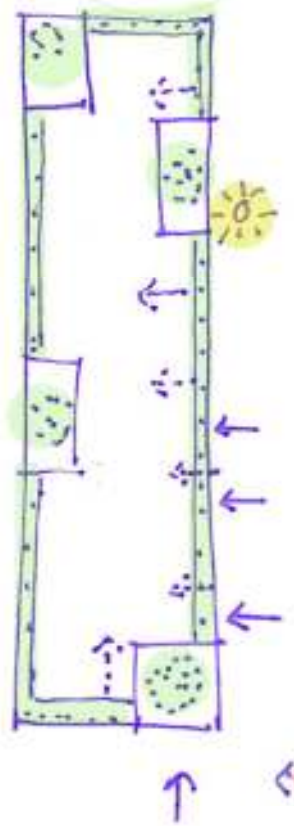
decreasing west facade area in order to reduce cooling load

physical environment&structure

building façade LEVENT

geometry/passive climatization

Green envelope enfolding the whole building with other shadowing elements has been used as an effective façade component to reduce cooling loads. Double-storied inner gardens contribute to natural ventilation.



Natural
Air Conditioning

physical environment&structure

building façade

LEVENT

geometry/passive climatization

façade console



physical environment & structure

building façade LEVENT

/utilization of plantation

benefiting from daylight at most / contributing to shadowing / optimization of energy consumption in HVAC and lighting

Phyllostachys aureosulcata 'Aureocaulis'

The culms are a beautiful lemon yellow color in fall, when planted where direct sun shines on the culms from the south and the west, they often acquire a bright magenta highlight for a short time in the spring. This is the hardiest bamboo that has golden culms. A real jewel, one of our most spectacular bamboos, especially in the early summer as the new culms acquire their brightest color.

Planting interval: 2 plants in one planter



Aucuba japonica 'Crotonifolia'

Dense shrub which produces vigorous green stems covered in large, waxy, leathery, bright green, marked or gold on yellow. The female plants produce large shiny red berries which last for many months. Tolerant to soil, pollution and sea winds. It is able to grow beneath the foliage of trees.

Planting interval: 2 plants in one planter

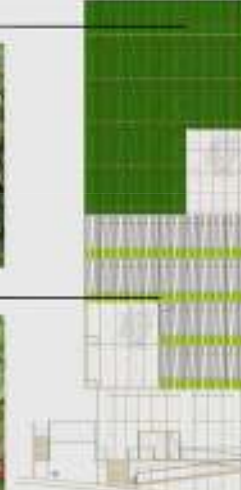


SOUTH FAÇADE

Phyllostachys aureosulcata 'Aureocaulis'

The culms are a beautiful lemon yellow color in fall, when planted where direct sun shines on the culms from the south and the west, they often acquire a bright magenta highlight for a short time in the spring. This is the hardiest bamboo that has golden culms. A real jewel, one of our most spectacular bamboos, especially in the early summer as the new culms acquire their brightest color.

Planting interval: 2 plants in one planter



Pistacia lentiscus

Dark green shrub typical to the Mediterranean region. It has an upright habit usually, then it spreads out and the stems become round. Pistacia leaves made up of 3-5 pairs of leathery leaflets, glossy dark green on the upper side, pale on the underside, which becomes reddish when the weather is cold. When the leaves are yellow they give off a strong smell of resin. An important flower but the seed that is very showy, covering the plant in autumn, having black when ripe. It is one of the most suitable plants for dry areas but it requires quite little soil. Mediterranean growing.

Planting interval: 3 plants in one planter

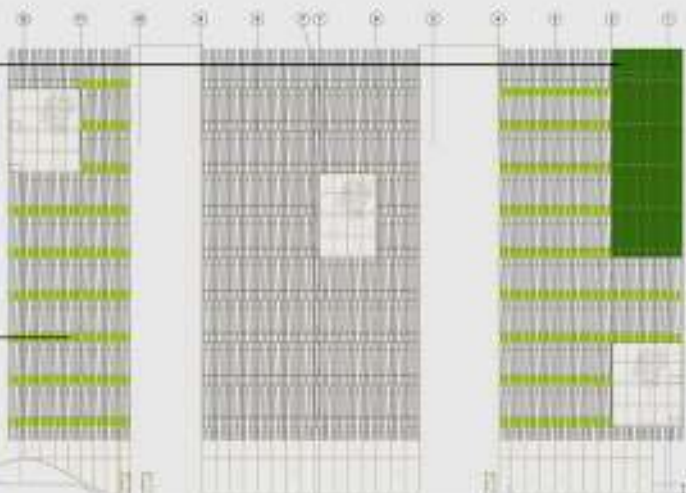


WEST FAÇADE

Phyllostachys aureosulcata 'Aureocaulis'

The culms are a beautiful lemon yellow color in fall, when planted where direct sun shines on the culms from the south and the west, they often acquire a bright magenta highlight for a short time in the spring. This is the hardiest bamboo that has golden culms. A real jewel, one of our most spectacular bamboos, especially in the early summer as the new culms acquire their brightest color.

Planting interval: 2 plants in one planter



Osmanthus ilicifolius

Evergreen dense, upright, upright rounded shrub. The plant has small white flowers in fall, very fragrant. Small purple-black drupes. The leaves are opposite, simple, leathery, but they are dark green, shiny pointed. Requires soil to be fertile acidic, porous, fertile, moist, well-drained, acidic soil. Drought resistant, tolerant, can be severely pruned, makes a good screen.

Planting interval: 4 plants in one planter



NORTH FAÇADE

EAST FAÇADE

Osmanthus ilicifolius

Evergreen dense, upright, well rounded shrub. The plant has small white flowers in fall, very fragrant. Small purple-black drupes. The leaves are opposite, simple, leathery, but they are dark green, shiny pointed. Requires soil to be fertile acidic, porous, fertile, moist, well-drained, acidic soil. Drought and heat tolerant, can be severely pruned, makes a good screen.

Planting interval: 4 plants in one planter



energy management

energy efficient HVAC design

free cooling & mechanical equipment with high COP

selection of compatible engineering standards in order to optimize energy consumption while achieving high quality of life

automation / smart management of energy systems

armature efficiency

Levent Office is %34,7 more efficient in kWh compared to the baseline case that is simulated according to the ASHRAE90.1-2004

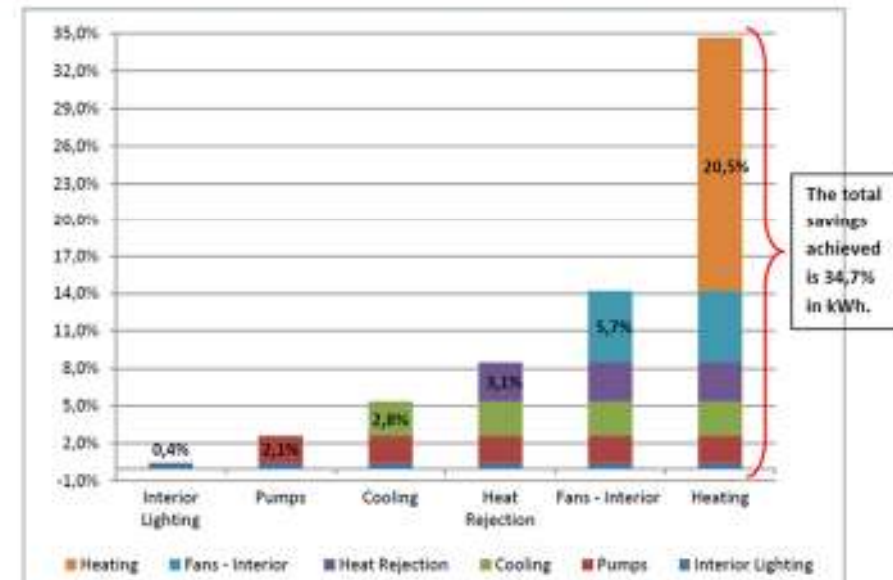
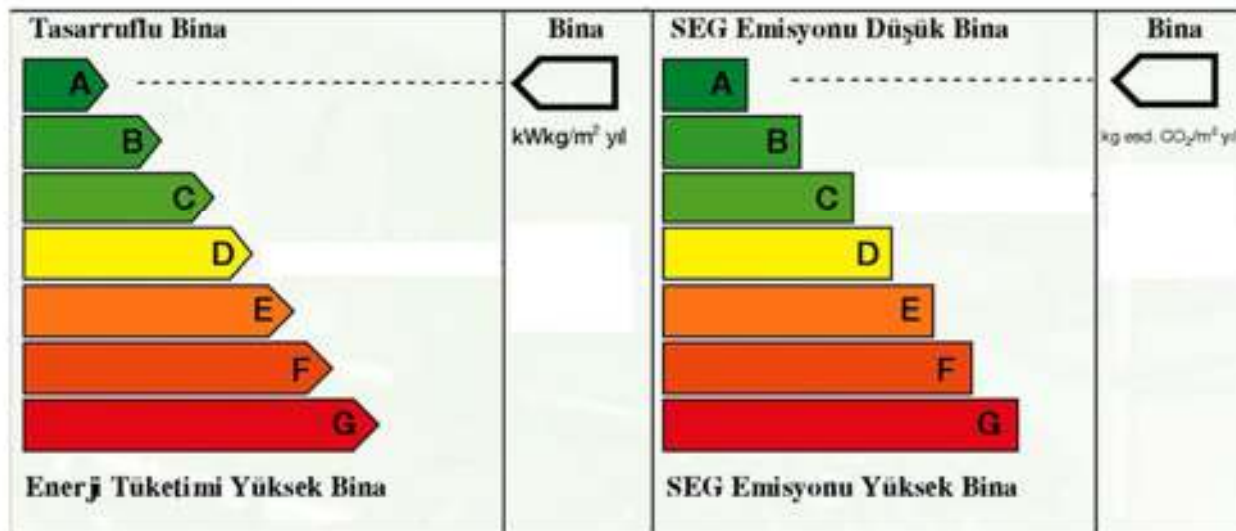


Figure 13: Optimized Performance incrementally achieved by various EEM (in kWh)

resource management

water efficiency;

- efficient armatures
- grey water treatment
- rainwater storage supporting irrigation
- vegetation with less need for irrigation
- efficient irrigation systems(drip irrigation)

Örünler
Armatür ve Sinyal Aksesuarları / Çelik Ürünler / Filtresiz / Aquatouch Armatür
Filtresiz Lavabo Batakyası (Özellikli)



Web Kodu : 447020

Küçük inçli armatürler için en uygun montaj yapılmalıdır. Çiğim suyu yüksekliği 172 mm'dir. Sadece soğuk su bağlantıları için uygundur. Paslanmaz çelik. Sızdıran ve suyun fışkırtma tehlikesi. Çiğim suyu yüksekliği 172 mm'dir. Sadece soğuk su bağlantıları için uygundur. Sızdıran ve suyun fışkırtma tehlikesi.

This fixture will be set to 7.5 liter / sec flowrate on the field.

Örünler
Tamamlayıcı Ürünler / Rezervuarlar / Kumanda Panelleri / Kumanda Panelleri / 711-2085 Ondan Başlamak 3-8 lt



Web Kodu : 711-2085

Ekstra Özellik : Kumanda Panelleri

Dual-flush WC fixture 3-8 lt / per flush

Örünler
Armatür ve Sinyal Aksesuarları / Çelik Ürünler / Filtresiz / Aquatouch Armatür
Lavabo Batakyası (Özellikli)



Web Kodu : 447021

Çiğim suyu yüksekliği 135 mm'dir. Çiğim suyu yüksekliği 135 mm'dir. Sadece soğuk su bağlantıları için uygundur. Filtresiz armatürler için uygundur. Sızdıran ve suyun fışkırtma tehlikesi. Çiğim suyu yüksekliği 135 mm'dir. Sadece soğuk su bağlantıları için uygundur. Sızdıran ve suyun fışkırtma tehlikesi.

This fixture will be set to 7.5 liter / sec flowrate on the field.

WATER USE SUMMARY

Baseline Case - Annual Water Consumption (gal):	1,128,232	gallons/year
Design Case - Annual Water Consumption (gal):	958,591	gallons/year
Total Annual Non-Potable Water Consumption (gal):	384,336	gallons/year
Total Water Savings:	49.1	%

For credit compliance, a water savings of at least 20% earns 1 LEED point, and a water savings of at least 30% earns 2 LEED points.

quality of life



thermal comfort

indoor air quality

daylight&view

**low-emitting materials(adhesives,
paints&coatings, carpets, composite wood)**

indoor chemical&pollutant source control

controllability of systems, thermal comfort

innovation

divergent organization schemes *proactive strategies & agendas*

technology infrastructure
interdisciplinary communication



exemplary performance
specialization *exceeding international standards*