

## DAFTAR ISI

DAFTAR GAMBAR.....	x
DAFTAR TABEL.....	xi
BAB 1 .....	1
PENDAHULUAN .....	1
1.1 Latar Belakang .....	1
1.2 Tujuan dan Saran .....	1
1.2.1 Tujuan dan Saran .....	2
1.2.2 Tujuan dan Saran .....	2
1.3 Manfaat.....	2
1.3.1 Secara Subyektif. ....	2
1.3.2 Secara Obyektif .....	2
1.4 Ruang Lingkup.....	2
1.4.1 Substansial .....	2
1.4.2 Spasial .....	2
1.5 Metode Pembahasan .....	2
1.6 Sistematika Pembahasan .....	3
BAB 2 .....	4
TINJAUAN PUSTAKA .....	4
2.1 Tinjauan Umum Rental Office .....	4
2.1.1 Tinjauan Rental Office .....	4
2.1.2 Fungsi Rental Office .....	4
2.1.3 Tipologi Rental Office .....	5
2.1.4 Spesifikasi Rental Office .....	7
2.1.5 Tipologi Rental Office .....	6
2.1.6 Standar Perancangan Ruangi Rental Office .....	10
2.1.7 Persyaratan dan Kriteria Ruang .....	14
2.1.8 Fasilitas Penunjang Rental Office .....	15
2.2 Tinjauan Khusus Rental Office .....	15
2.2.1 Uraian Khusus Pelaku Kegiatan .....	15
2.2.2 Uraian Khusus Pelaku Kegiatan .....	16
2.3 Tinjauan Perancangan Berbasis EDGE (Exellence in Design for Greater Efficiencies).....	16
2.3.1 Tentang EDGE .....	18
2.3.2 Karakteristik Kantor dalam EDGE .....	18
2.3.3 Building Orientation .....	18
2.3.4 Saving Energy .....	19
2.3.5 Saving Water .....	21
2.3.6 Saving Material .....	22
BAB 3 .....	23
TINJAUAN DATA .....	23
3.1 Tinjauan Umum Kota Yogyakarta Efficiencies.....	23
3.1.1 Keadaan Geografis.....	23

3.1.2 Keadaan Topografi dan Klimatologis Kota Yogyakarta.....	24
3.1.3 Data Kependudukan Kota Yogyakarta.....	24
3.2 Tapak .....	25
3.2.1 Potensi Lokasi Tapak .....	26
3.1 Analisa Tapak dan Gubahan Massa.....	26
BAB 4 .....	27
PENDEKATAN DESAIN DENGAN PERHITUNGAN EDG.....	27
4.1 Analisa Tapak dan Gubahan Massa.....	27
4.2 Zonasi.....	28
4.3 Data Bangunan .....	28
4.4 Program Ruang .....	29
4.5 Orientasi dan Kedalaman Bangunan .....	30
4.6 Efisiensi Energi .....	30
4.6.1 Reduced Window to Wall Ratio .....	30
4.6.2 External Shading Device AASF... ..	32
4.6.3 Variable Refrigerant Flow (VRF).. ..	33
4.7 Efisiensi Air .....	34
4.7.1 Low- Flow Faucets in All Bathrooms .....	34
4.7.2 Dual Flush for Water Closets in All Faucets in All Bathrooms .....	35
4.7.3 Water Efficient Urinals Closets in All Faucets in All Bathrooms .....	35
4.7.4 Water Efficient Faucets for Kitchen Sinks .....	36
4.7.5 Rainwater Harvesting System .....	36
4.7.6 Grey Water Treatment and Recycling System.....	36
4.8 Efisiensi Material .....	37
4.8.1 Floor Slabs.....	38
4.8.2 Roof Construction.....	39
4.9 External Walls .....	40
4.9.1 External Walls .....	40
4.9.2 Curtain Walling .....	40
4.10 Internal Walls .....	41
4.10.1 Ferrocement Wall Panel (40%) .....	41
4.10.2 Plasterboards on Metal Studs (40%) .....	42
4.11 Flooring .....	42
4.11.1 Ceramic Tile .....	42
4.11.2 Finished Concrete Floor .....	43
4.12 Window Frames .....	43
BAB 5 .....	45
KESIMPULAN .....	45
5.1 Aspek EDGE .....	45
5.1 Final Result .....	45
DAFTAR PUSTAKA .....	46

## DAFTAR GAMBAR

Gambar 2.1 Layout Office .....	5
Gambar 2.2 Layout Office .....	5
Gambar 2.3 Layout Office .....	6
Gambar 2.4 Layout Office .....	6
Gambar 2.5 Layout Office .....	6
Gambar 2.6 Layout Office .....	6
Gambar 2.7 Layout Office .....	7
Gambar 2.8 Sistem Pencapaian Ruang .....	7
Gambar 2.9 Layout Peralatan .....	11
Gambar 2.10 Layout Peralatan .....	11
Gambar 2.11 Layout Peralatan .....	11
Gambar 2.12 Ukuran Peralatan .....	11
Gambar 3.1 Peta Administrasi Kota Yogyakarta .....	23
Gambar 3.2 Lokasi Tapak .....	25
Gambar 4.1 Analisa Tapak dan Gubahan Massa .....	25
Gambar 4.2 Zoning .....	28
Gambar 4.3 Siteplan .....	28
Gambar 4.4 Perhitungan WWR .....	31
Gambar 4.5 Perbandingan Luas Jendela dan Dinding pada Kantor .....	32
Gambar 4.6 Perhitungan AASF .....	32
Gambar 4.7 Skema Sistem VRF .....	33
Gambar 4.8 Hasil Perhitungan VRF .....	33
Gambar 4.9 Skema Sistem VRF .....	33
Gambar 4.10 Skema Sistem Pendingin Ruangan Pada Bangunan Kantor .....	34
Gambar 4.11 Perhitungan Low-Flow Faucets in All Bathrooms .....	35
Gambar 4.12 Perhitungan Dual Flush for water closets in All Bathrooms .....	35
Gambar 4.13 Perhitungan Water-Efficient Urinals All Bathrooms .....	35
Gambar 4.14 Perhitungan Water-Efficient Faucets for Kitchen Sinks .....	36
Gambar 4.15 Perhitungan RainWater Harvesting System .....	36
Gambar 4.16 Skema Air Bersih dan Air Kotor .....	37
Gambar 4.17 Insitu Concrete For Floor Slabs.....	38
Gambar 4.18 Insitu Concrete For Roof Construction .....	39
Gambar 4.19 Ferrocement Wall Panel .....	40
Gambar 4.20 Curtain Walling for External Walls .....	41
Gambar 4.21 Ferrocement Wall Panel .....	41
Gambar 4.22 Plasterboards on Metal Studs for Internal Walls .....	42
Gambar 4.23 Ceramic Tile for Flooring .....	42
Gambar 4.24 Finished Concrete for Flooring .....	42

Gambar 4.25 Alumunium Windows Frames .....	43
Gambar 4.26 Perhitungan Efisiensi Material pada EDGE App .....	44
Gambar 4.27 Material pada Bangunan Kantor .....	44
Gambar 5.1 Final Result EDGE .....	45

## DAFTAR TABEL

Tabel 2.1 Standart Lift .....	12
Tabel 2.1 Standart Toilet .....	12
Tabel 2.3 Fasilitas Kantor Sewa .....	15
Tabel 2.4 Kebutuhan Ruang Utama .....	17
Tabel 2.5 Kebutuhan Ruang Penunjang .....	17
Tabel 4.1 Rekomendasi Program Ruang .....	29
Tabel 4.2 Orientasi dan Kedalaman Bangunan .....	30
Tabel 4.3 Perhitungan Jumlah Air Daur Ulang.....	36
Tabel 4.4 Perhitungan Kapasitas GWT .....	37