

## CASE STUDY CAMPUS A58

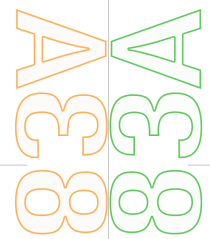
Projectlocation: Majoppeveld Noord, Roosendaal

Projectnummer: 2120

Function: Logistic Industry

Website project: <https://www.logisticscapitalpartners.com>





## Content

<b>INTRODUCTION .....</b>	<b>3</b>
1. SUSTAINABILITY .....	3
2. BREEAM-NL.....	3
<b>SUSTAINABILITY MEASURES .....</b>	<b>4</b>
1. CONSTRUCTION SITE AND PROCESS.....	4
2. ENERGY .....	4
3. HEATING AND COOLING .....	4
4. AIR HANDLING.....	5
5. LIGHTING .....	5
6. TRANSPORT.....	5
7. WATER USE.....	5
8. ENERGY MONITORING.....	5
9. COMFORT.....	5
10. LESSONS LEARNED .....	6
<b>PROJECT DATA.....</b>	<b>7</b>
<b>PROJECT TEAM .....</b>	<b>7</b>
<b>BREEAM CREDITS.....</b>	<b>8</b>

## Introduction

At Majoppeveld Noord in Roosendaal, Logistics Capital Partners has redeveloped the former Philips site into a high-quality logistics center. Stripes Architects from Eindhoven designed the building, and 83A made the project's sustainability ambitions tangible. The building combines sustainability and functionality with a contemporary appearance.

### 1. Sustainability

The new building represents long-term quality and meets modern sustainability standards. This is achieved through the use of sustainable materials and energy efficiency measures, such as PV panels and an air-to-water heat pump.

### 2. BREEAM-NL

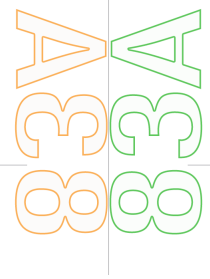
To make the degree of sustainability transparent, the project was certified according to the BREEAM-NL methodology. BREEAM is a method developed by the British Building Research Establishment (BRE) to measure the environmental performance of buildings comparable to the Dutch research institute TNO. BREEAM-NL is the Dutch adaptation, developed by the Dutch Green Building Council (DGBC).

A building (including the construction site) is assessed based on multiple categories, ranging from management of the construction process and site, health and wellbeing of users, energy efficiency, and accessibility, to waste separation and ecological impact. The design aimed for a BREEAM Excellent rating.

The score is composed of category sub-scores, each with its own weighting:

- Management (12%)
- Health & Wellbeing (15%)
- Energy (19%)
- Transport (8%)
- Water (6%)
- Materials (12.5%)
- Waste (7.5%)
- Land Use & Ecology (10%)
- Pollution (10%)

This results in an overall score expressed in stars. A BREEAM Excellent (4 stars) rating requires  $\geq 70\%$ . The expected score for Campus A58 is approximately 73%.



## SUSTAINABILITY MEASURES

During the design and construction of Campus A58, various sustainability measures were and will be implemented. The most important are listed below.

### 1. Construction Site and Process

To reduce environmental impact during construction, several measures were taken. The contractor minimized CO<sub>2</sub> emissions and water consumption caused by on-site activities and logistics. Pollution of the surroundings or groundwater was prevented through protective measures. Local materials and contractors were used wherever possible, and all timber used on site and in offices was FSC-certified.

An ecologist prepared a work protocol for the contractor, describing how to handle protected plants and animals encountered during construction, thus safeguarding local flora and fauna.

### 2. Energy

The design included a large rooftop PV installation to fully power the building and operations. Unfortunately, due to grid congestion, this could not be realized.

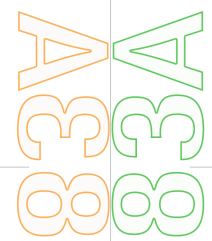
### 3. Heating and Cooling

Heating and cooling of the warehouse are generally unnecessary. Thanks to highly insulated façades and the building's airtightness, indoor temperatures remain comfortable year-round.

Energy-efficient gas heaters safeguard the minimum temperature during extreme weather conditions; these are used only occasionally.

Because of the airtight and well-insulated structure, active cooling is also unnecessary in summer. The thermal mass of stored goods further helps to stabilize indoor temperatures throughout the year.

The offices are actively heated and cooled using a smart air-handling system that regulates temperature at workplace level.



## 4. Air Handling

The office building uses balanced mechanical ventilation. Supply and exhaust air are regulated via an air-handling unit equipped with a heat recovery wheel (approx. 75 % efficiency). By recovering heat and humidity, the system reduces the need for additional heating and humidification. Supply air is maintained at 18 °C year-round, minimizing local heating in winter and cooling in summer. The system is switched off at night to prevent unnecessary energy consumption.

## 5. Lighting

LED lighting is installed throughout the building, creating a pleasant working environment. The installed lighting capacity is approximately 50 % lower than standard, reducing cooling demand. Presence detection ensures lights are only on when needed, and daylight-dependent dimming along the façades automatically lowers light levels when sufficient daylight is available.

## 6. Transport

The site includes a large bicycle shelter and shower facilities, encouraging employees to commute by bike. In addition, the building is within walking distance of several bus stops, facilitating access by public transport.

## 7. Water Use

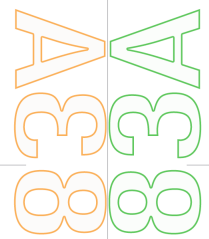
A leak detection system monitors water use and automatically shuts off the main valve in case of leaks, preventing water waste. Water-saving toilets and taps further reduce consumption.

## 8. Energy Monitoring

Smart meters have been installed throughout the building. These enable real-time monitoring of energy consumption, allowing identification of energy-intensive areas or operations and providing a basis for improvement.

## 9. Comfort

The building offers a sustainable and pleasant working environment. Abundant daylight and exterior views are available from all office workstations. Temperature control is available per room, and in larger spaces per zone, ensuring comfort for all users.



## 10. Lessons Learned

The BREEAM process provided valuable insights into sustainable design and feasibility. Certain aspects benefit significantly from early integration, offering more options during engineering.

In future projects, we will use BREEAM as a guiding framework from the very beginning of the project organization.

## PROJECT DATA

Gross floor area	115,118 m <sup>2</sup>
Site area	20.98 ha
Office function area	2,867 m <sup>2</sup>
Assembly function area	2,494 m <sup>2</sup>
Industrial function area	115,118 m <sup>2</sup>
Car parking spaces	250
Bicycle parking spaces	32
Expected electricity consumption	123,611 kWh (office only, excl. PV)
Expected electricity generation	46,611 kWh
Expected gas consumption	100 m <sup>3</sup> (gas, warehouse)
Expected water consumption	5 m <sup>3</sup> per person per year
Use of greywater or rainwater	N/A

## PROJECT TEAM

Developer	Logistics Capital Partners
Tenant	Lidl
Project Management	LCP
Architect	Stripes Architects
Sustainability Consultant	83A Sustainable Solutions
MEP Consultant	Wolf Dikken Adviseurs
Main Contractor	Bouwbedrijf Vrolijk
Fit-Out Contractor	CNSTRCT
MEP Installer	Barth Installatietechniek

# BREEAM CREDITS

Projectnaam Plaats Projectnummer Datum Documentversie BREEAM versie		DC Campus A58 Roosendaal 2120 09-dec-24 1.6 BRL 2014 v2.0		Opdrachtgever Architect Aannemer Installateur Adviseur BREEAM Expert		Logistics Capital Partners Stripes Architects Bouwbedrijf Vrolijk Barth Wolff-Dikken 83A							
ambitie: EXCELLENT geen PV installatie				 83A Vossenbrink 22 7491 DH Delden +31 74 357 49 04 www.83a.nl service@83a.nl kvk-nr: 54467673		verplichte credits EXCELLENT							
Weging				Onderdeel		industriefunctie 94000 m <sup>2</sup> maximaal haalbare credits uitgangspunten mogelijkheids		kantoorfunctie 500 m <sup>2</sup> maximaal haalbare credits uitgangspunten mogelijkheids		bijskerkfunctie 100 m <sup>2</sup> maximaal haalbare credits uitgangspunten mogelijkheids		percentage naar rato	
Man 1	Prestatieborging	3	3	3	3	3	3						
Man 2	Bouwplaats en omgeving	2	2	2	2	2	2						
Man 3	Milieu- impact bouwplaats	4	4	4	4	4	4						
Man 4	Gebruikershandleiding	1	1	1	1	1	1						
Man 6	Consultatie	1	1	1	1	1	1						
Man 8	Veiligheid	1	1	1	1	1	1						
Man 9	Kennisoverdracht	1	1	1	1	1	1						
Man 11	Onderhoudsgemak	1	1	1	1	1	1						
Man 12	Levenscyclus Kostenanalyse	2	2	2	2	2	2						
Haa 1	Daglichttoetreding	16	14	10,50 %	16	14	10,50 %	16	14	10,50 %	10,50 %		
Haa 2	Uitzicht	1	1		1	1		1	1				
Haa 3	Teengaan lichtinval	1	1		1	1		1	1				
Haa 4	Hoop frequent verlichting	1	1		1	1		1	1				
Haa 5	Kunstverlichting binnen en buiten	1	1		1	1		1	1				
Haa 6	Lichtregeling	1	1		1	1		1	1				
Haa 7	Spuventilatie	1	1		1	1		1	1				
Haa 8	Interne Luchtwissel	2	2		2	2		2	2				
Haa 9	Vluchtige organische verbindingen	1	1		1	1		1	1				
Haa 10	Thermisch comfort	2	2		2	2		2	2				
Haa 11	Temperatuurregeling	1	1		1	1		1	1				
Haa 13	Akoestiek	1	1		1	1		1	1				
Ena 1	CO2 emissie- reductie	9	9	15,00 %	14	9	9,64 %	14	9	9,64 %	14,97 %		
Ena 2a	Sub- metering energieverbruiken	15	15		15	15		15	15				
Ena 4	Energiezuinig buitenverlichting	1	1		1	1		1	1				
Ena 5	Toepassing van hernieuwbare energie	3	3		3	3		3	3				
Ena 6	Minimalisatie infiltratie laad-/losplatforms	1	1		1	1		1	1				
Ena 8	Energiezuinig liften	2	2		2	2		2	2				
Ena 26	Waarborging thermische kwaliteit gebouwschil	2	2		2	2		2	2				
Tra 1a	Aanbod van CV	26	11	8,04 %	26	20	14,62 %	26	20	14,62 %	8,08 %		
Tra 2	Afstand tot basisvoorzieningen	2	1		2	1		2	1				
Tra 3a	Alternatief vervoer	2	2		2	2		2	2				
Tra 4	Voetgangers- en fietsersveiligheid	2	1		2	1		2	1				
Tra 5	Vervoersplan en parkeerbeleid	3	3		3	3		3	3				
Tra 7	Vervoersinformatiepunt	1	1		1	1		1	1				
Tra 8	Toelevering en manoeuvreren	1	1		1	1		1	1				
Wat 1a	Waterverbruik	12	7	4,67 %	12	7	4,67 %	14	8	4,67 %	4,67 %		
Wat 2	Watermeter	3	2		3	2		3	2				
Wat 3	Lekdetectie hoofdwatersluiting	1	1		1	1		1	1				
Wat 4	Zelfsluitende watertoevoer sanitair	1	1		1	1		1	1				
Wat 5	Recycling van water	1	1		1	1		1	1				
Wat 6	Inciatiesystemen	1	1		1	1		1	1				
Mat 1	Bouwmaterialen	8	6	4,50 %	8	6	4,50 %	8	6	4,50 %	4,50 %		
Mat 5	Onderbouwde herkomst van materialen	8	2		8	2		8	2				
Mat 7	Robuust ontwerpen	4	2		4	2		4	2				
Mat 8	Gebouwflexibiliteit	1	1		1	1		1	1				
Wst 1	Afvalmanagement op de bouwplaats	13	5	4,81 %	17	5	3,68 %	17	5	3,68 %	4,80 %		
Wst 2	Gebruik van secundair materiaal	3	3		3	3		3	3				
Wst 3a	Opslagruimte voor herbruikbaar afval	1	1		1	1		1	1				
Wst 6	Inrichting	1	1		1	1		1	1				
LE1	Hergebruik van land	6	6	7,50 %	6	6	7,50 %	6	6	7,50 %	7,50 %		
LE2	Verontreinigde bodem	5	5		5	5		5	5				
LE3	Aanwezigheid planten en dieren op de locatie	2	2		2	2		2	2				
LE4	Planten en dieren als medegebruiker van het plangebied	1	1		1	1		1	1				
LE6	Duurzaam medegebruik van planten en dieren op lange termijn	2	2		2	2		2	2				
Poi 1	GWP van koelmiddelen voor klimatisering	11	11	10,00 %	11	11	10,00 %	11	11	10,00 %	10,00 %		
Poi 2	Voorkomen van lekkages van koelmiddelen	1	1		1	1		1	1				
Poi 4	Ruimteverwarming gerelateerde Nox emissie	2	1		2	1		2	1				
Poi 6	Alstroomend regenwater	3	1		3	1		3	1				
Poi 7	Minimalisering lichtvervuiling	3	2		3	2		3	2				
Poi 8	Geluidsoverlast	1	1		1	1		1	1				
EP Man 3	Milieu- impact bouwplaats	1	1		1	1		1	1				
EP Haa 1	Daglichttoetreding	1	1		1	1		1	1				
EP Ena 1	CO2-emissie reductie	2	2		2	2		2	2				
EP Ena 5	Toepassing van duurzame energie	1	1		1	1		1	1				
EP Tra 3a	Alternatief vervoer	1	1		1	1		1	1				
EP Mat 1	Bouwmaterialen	1	1		1	1		1	1				
EP Mat 5	Onderbouwde herkomst van materialen	1	1		1	1		1	1				
EP Wst 1a	Afvalmanagement op de bouwplaats	1	1		1	1		1	1				
EP Wst 2	Gebruik van secundair materiaal	1	1		1	1		1	1				
EP Poi 4	Ruimteverwarming gerelateerde Nox emissie	1	1		1	1		1	1				
TOTAAL	EXCELLENT	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	73,56 %	

