

**BUILD IT AND
THEY WILL COME.
OUR REGENERATIVE
IMPACT REPORT 2026.**



WE WILL BUILD A STRONGER SOUTH AFRICA TOGETHER.

[CLICK HERE TO EXPLORE OUR WEBSITE](#)





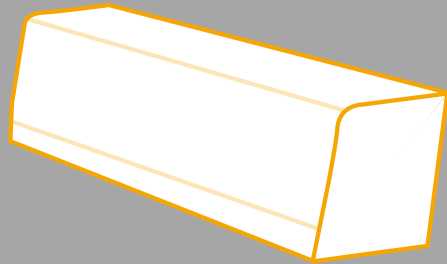
BUILDING A REGENERATIVE FUTURE

“It was an easy decision to incorporate RES-
IN8™ into our arsenal of green solutions
which bring us one step closer to our ultimate
goal of Zero Waste to Landfill.”
*Renier Smith, Group Manager: Engineering & Planning
at Garden Cities*



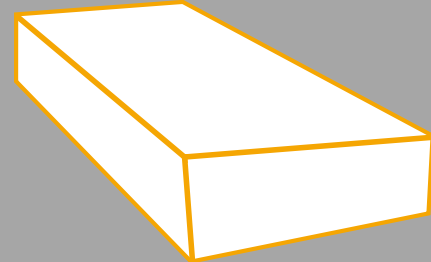
DEVELOPER: GARDEN CITIES
MANUFACTURER: BLUBLOK
ECO - AGGREGATE: RESIN8™ / 6mm & 2mm
PRODUCTS: KERBS & CHANNELS / 690 METERS
LOCATION: SUNNIGDALE / CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
RESIN8™ 5% BY VOLUME
RESIN8™ PER KERB: 1050grams

**TOTAL MIXED PLASTIC
WASTE SEQUESTERED:**
607kg



MIX DESIGN:
RESIN8™ 5% BY VOLUME
RESIN8™ PER CHANNEL: 920grams

**TOTAL MIXED PLASTIC
WASTE SEQUESTERED:**
531kg



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
1140kg



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
45 000
PET BOTTLES*
*calculated @ 25g per empty bottle



GARDEN CITIES
BEYOND 100 YEARS

BLUBLOK
manufacturers of superior cement products



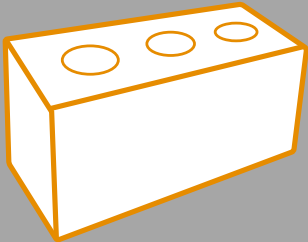
A BETTER HOME FOR ALL

“RESIN8™ is proof that by changing our perspective on the way we view concrete products and making minor changes to the way we produce and manufacture these products, results in major sustainable benefits.”
Tashriq Abrahams, Architect Bitprop



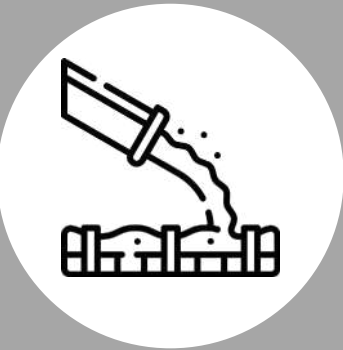
DEVELOPER: BITPROP / 90SQm DOUBLE STORY UNIT
MANUFACTURER: INCA CONCRETE PRODUCTS & COASTAL READYMIX
ECO - AGGREGATE: RESIN8™ / 6mm & 2mm
PRODUCTS: 14 MPa MAXI BRICKS/ 25MPa FOUNDATIONS & FLOORS
LOCATION: LITHA PARK / KHAYELITSHA / CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
MAXI BRICKS: 22 000
RESIN8™ 10% BY VOLUME
RESIN8™ PER BRICK: 90grams

TOTAL MIXED PLASTIC WASTE SEQUESTERED:
4200kg



MIX DESIGN:
FOUNDATIONS & FLOORS
RESIN8™: 2.5% BY VOLUME
TOTAL RESIN8™: 1000Kg

TOTAL MIXED PLASTIC WASTE SEQUESTERED:
800kg



TOTAL MIXED PLASTIC WASTE SEQUESTERED:
5000kg
per 110 square meter unit



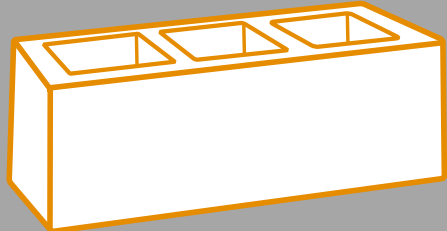
TOTAL PLASTIC SEQUESTERED EQUAL TO:
2 500 000
CHIP PACKETS*
*calculated @ 2g per empty packet

CASE STUDY #3 REGENERATIVE IMPACT IN ACTION



DEVELOPER: GARDEN CITIES / HOUSING
MANUFACTURER: BENEX
ECO - AGGREGATE: RESIN8™ / 6mm
PRODUCTS: BENEX BLOCKS
LOCATION: GREENVILLE / CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
BENEX BLOCKS: 7 000
RESIN8™ 5% BY VOLUME
RESIN8™ PER BLOCK: 250grams



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
1500kg
per 110 square meter unit



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
750 000
CHIP PACKETS*
*calculated @ 2g per empty packet

CRDC’s “The Bag That Builds” plastic waste collection programme was successfully implemented in the stadium during the 2022 Springboks vs Wales test match in Cape Town as well as the 2022 Sevens Rugby World Cup. The plastic waste collected from these events was turned into RESIN8 & used in the construction of social houses.



GARDEN CITIES
BEYOND 100 YEARS



International
Olympic
Committee

**CLIMATE ACTION
AWARDS 2023**



RESIN8



LAYING THE FOUNDATION TO ZERO WASTE

“RESIN8™ was being used in the new developments at the V&A Waterfront including the concrete deck for the new home of the OZCF market. CRDC SA supports the V&A goal of Zero Waste to landfill.



DEVELOPER: V & A WATERFRONT
MANUFACTURER: OMEGA CONCRETE
ECO - AGGREGATE: RESIN8™ 2mm
PRODUCTS: 40MPa READY-MIX
LOCATION: V & A WATERFRONT / CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
CONCRETE: 390m3
RESIN8™ 2.5% BY VOLUME
TOTAL RESIN8™: 2925Kg
Required MPa: 40
Achieved MPa: 45



TOTAL MIXED PLASTIC WASTE SEQUESTERED:
2399Kg



TOTAL PLASTIC SEQUESTERED EQUAL TO:
1 199 250
CHIP PACKETS*
*calculated @ 2g per empty packet



V&A WATERFRONT
CAPE TOWN



ZERO WASTE
TECHNOLOGIES

GROWTH-POINT
PROPERTIES



FRAMECORE
CONSTRUCTION

ΩMEGA
CONCRETE

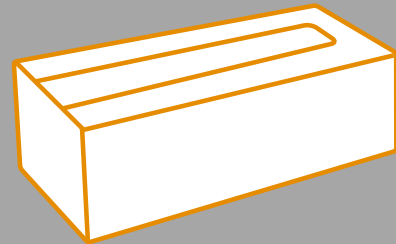


BUILDING A BETTER
WORLD AT SCALE



DEVELOPER: GROWTHPOINT **CONTRACTOR:** ABBEYDALE
MANUFACTURER: AJ On Site
ECO - AGGREGATE: RESIN8™ 2mm
PRODUCTS: 7MPa IMPERIAL LIGHT BRICK
LOCATION: CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
BRICKS: 196 000
RESIN8™ 5% BY VOLUME
TOTAL RESIN8™: 8200Kg
Required MPa: 14
Achieved MPa: 15.3



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
7200kg



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
3 600 250
CHIP PACKETS*
*calculated @ 2g per empty packet

GROWTHPOINT
PROPERTIES



CASE STUDY #6 REGENERATIVE IMPACT IN ACTION



DEVELOPER: WESTERN CAPE GOVERNMENT
MANUFACTURER: INCA CONCRETE PRODUCTS
CONSTRUCTION COMPANY: MARTIN & EAST
ECO-AGGREGATE: RESIN8™ / 6mm
PRODUCTS: 80mm PAVERS

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS



MIX DESIGN:
PAVERS: 95 400 / 1 800m²
RESIN8™ 10% BY VOLUME
RESIN8™ PER PAVER: 90grams



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
6900Kg
4Kg per m² of paving



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
3 434 000
CHIP PACKETS*
*calculated @ 2g per empty packet
2000 chip packets per m² of paving



**MINED AGGREGATE
SAVED:**
32 200Kg





BUILDING A
REGENERATIVE
SOUTH AFRICA
ONE ROAD AT A TIME



DEVELOPER: ATLANTIS SPECIAL ECONOMIC ZONE / CAPE TOWN
MANUFACTURER: MUCH ASPHALT
CONSTRUCTION COMPANY: WCB CONSTRUCTION
ECO-ADDITIVE: RESIN8™ / 6mm
PRODUCT: HOT MIX ASPHALT

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



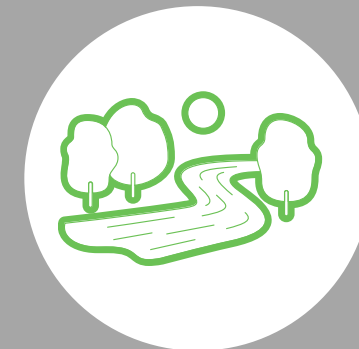
MIX DESIGN:
ASPHALT HOT MIX: 540 Tons
RESIN8™ 4% BY VOLUME
RESIN8™ TOTAL: 27 TONS



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
23 000kg



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
11 500 000
CHIP PACKETS*
*calculated @ 2g per empty packet
2000 chip packets per m² of paving



**MINED AGGREGATE
SAVED:**
87.0Tons



CASE STUDY #8 REGENERATIVE IMPACT IN ACTION

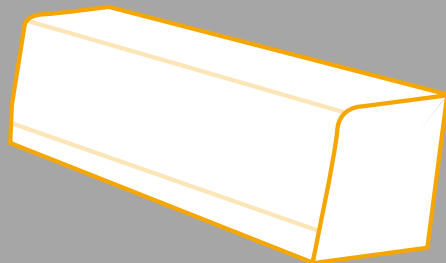


WELCOME TO
THE CONCRETE
SOLUTION TO
PLASTIC WASTE



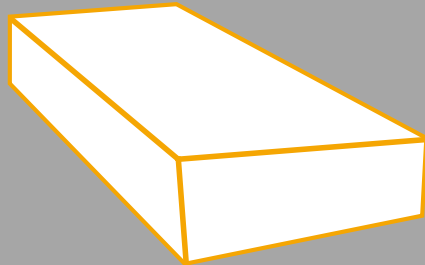
DEVELOPER: CITY OF CAPE TOWN
MANUFACTURERS: I & S CONCRETE, CAPE CONCRETE & TUTIZONE
CONSTRUCTION COMPANY: MARTIN & EAST
ECO-ADDITIVE: RESIN8™ / 6mm
PRODUCT: KERBS, EDGINGS & CHANNELS
LOCATION: AZ BERMAN / CAPE TOWN

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
RESIN8™: 10% BY VOLUME
RESIN8™ PER KERB: 1050grams
RESIN8™ TOTAL: 47.34 TONS
KERBS: 10 000 / 26.3 Km

**TOTAL MIXED PLASTIC
WASTE SEQUESTERED:**
38.87Tons



MIX DESIGN:
RESIN8™: 10% BY VOLUME
RESIN8™ PER CHANNEL: 920grams
TOTAL RESIN8™: 31.1 TONS
CHANNELS: 17 100 / 17.1 Km

**TOTAL MIXED PLASTIC
WASTE SEQUESTERED:**
24.62Tons



MIX DESIGN:
RESIN8™ 5% BY VOLUME
RESIN8™ PER EDGING: 1050grams
TOTAL RESIN8™: 12.7 TONS
EDGINGS: 12 100 / 12.1 Km

**TOTAL MIXED PLASTIC
WASTE SEQUESTERED:**
10.16Tons



**TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:**
70.6Tons



**TOTAL PLASTIC
SEQUESTERED
EQUAL TO:**
45 000
PET BOTTLES*
*calculated @ 25g per empty bottle



**MINED AGGREGATE
SAVED:**
304.8Tons



BUILDING HOMES & PROSPERITY FOR ALL

“At UTTE, Resin8 is exciting because it proves that the future of affordable housing and the future of sustainability can, and must be the same conversation. We are taking one of the world’s biggest environmental challenges and quite literally embedding it into safer and more dignified homes in creating resilient urban communities.”

Benjamin Kollenberg
Architect @ UTT South Africa

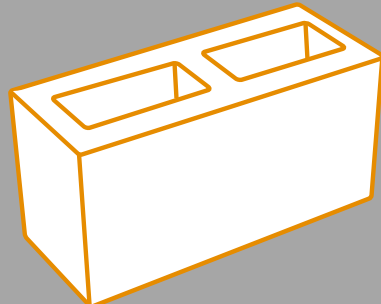


DESCRIPTION: 62 x 42m2 BNG TWO BEDROOM DOUBLE STOREY UNITS
DEVELOPER: UTTE
ARCHITECTS: UTTE
CONSULTING ENGINEERS: DVH
MANUFACTURER: DUKATHOLE & CIOLLI READYMIX
CONTRACTOR: BAMBANA CONSTRUCTION
ECO-ADDITIVE: RESIN8™ / 6mm
PRODUCT: FOUNDATIONS, M140 & M90 BLOCKS
LOCATION: KHAYELITSHA CAPE TOWN

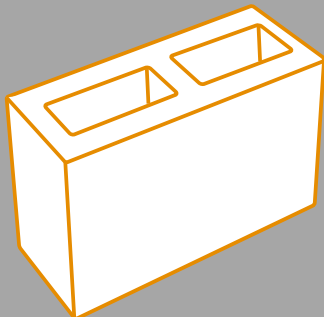
Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



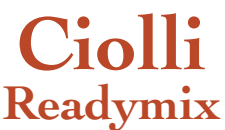
MIX DESIGN:
CONCRETE & REINFORCED
CONCRETE: 627m3 / 30MPa
RESIN8™ 2.5% BY VOLUME
TOTAL RESIN8™: 4390Kg



MIX DESIGN:
M140 BLOCKS: 21 925
RESIN8™ 10% BY VOLUME
RESIN8™ PER BLOCK: 181grams
TOTAL RESIN8™: 6230Kg



MIX DESIGN:
M90 BLOCKS: 35 650
RESIN8™ 10% BY VOLUME
RESIN8™ PER BLOCK: 131grams
TOTAL RESIN8™: 8340Kg



BUILDING HOMES
& PROSPERITY FOR ALL



TOTAL RESIN8™
18 960kg



TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:
15 550kg



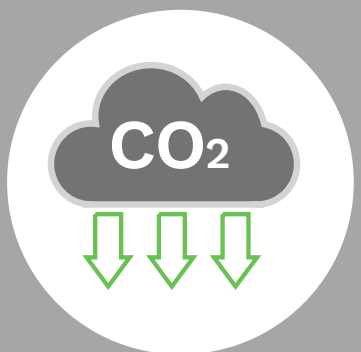
TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
622 000
PET BOTTLES*
*calculated @ 25g per empty bottle



TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
7 775 000
CHIP PACKETS*
*calculated @ 2g per empty packet
2000 chip packets per m² of paving

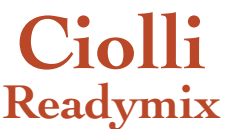


MINED AGGREGATE
SAVED:
66.35Tons



CO₂ SEQUESTERED:
30.14Tons
or 16 767m³

1590 Kg CO2 per ton of RESIN8
Plastic Disposal = 960Kg CO2 per ton
Source: South African Journal of Science & CRDC Waste Risk LCA
Mined Aggregate/Sand = 210Kg CO2 per ton
X 3.3 (RESIN8 replacement volume)
Source: Climate Trace and <https://github.com/climatecoalition>
One ton of CO2 occupies 556.2m³ of volume
Source: <https://www.icbe.com/carbon/database/CO2volume/calculation.asp>



Cement bricks, blocks and pavers



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

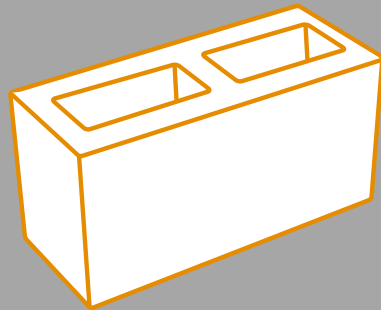


BUILDING BLOCKS
FOR A GREENER FUTURE

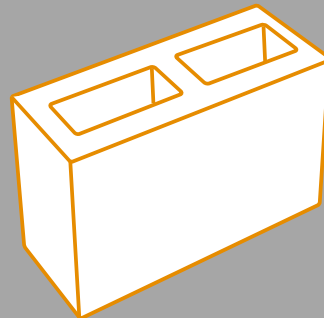


DESCRIPTION: 355 DOUBLE STOREY & 29 SINGLE X 40m2 BN HOMES
DEVELOPER: WESTERN CAPE GOVERNMENT / BNG HOMES
ARCHITECTS: WESTERN CAPE GOVERNMENT
CONSULTING ENGINEERS: WESTERN CAPE GOVERNMENT
MANUFACTURER: DUKATHOLE & AJ ONSITE
CONTRACTOR: MARTIN & EAST
ECO-ADDITIVE: RESIN8™ / 6mm
PRODUCT: M140, M90 BLOCKS & U BLOCKS

Concrete products made with a percentage of RESIN8 test within the technical requirements of the relevant SABS specification.



MIX DESIGN:
M140 BLOCKS: 571 443
RESIN8™ 5% BY VOLUME
RESIN8™ PER BLOCK: 181grams
TOTAL RESIN8™: 103 574Kg



MIX DESIGN:
M90 BLOCKS: 128 765
RESIN8™ 5% BY VOLUME
RESIN8™ PER BLOCK: 131grams
TOTAL RESIN8™: 16 900Kg



MIX DESIGN:
U BLOCKS: 34 080
RESIN8™ 5% BY VOLUME
RESIN8™ PER BLOCK: 181grams
TOTAL RESIN8™: 6177Kg



DUKATHOLE
Cement bricks, blocks and pavers



Western Cape
Government



BUILDING BLOCKS FOR A GREENER FUTURE



TOTAL RESIN8™
126 651kg



TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:
103 854kg



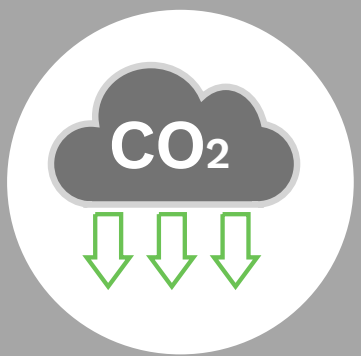
TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
4 154 160
PET BOTTLES*
*calculated @ 25g per empty bottle



TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
51 927 093
CHIP PACKETS*
*calculated @ 2g per empty packet
2000 chip packets per m² of paving



MINED AGGREGATE
SAVED:
354.62Tons



CO₂ SEQUESTERED:
201.37tons
or 112 004m³

1590 Kg CO₂ per ton of RESIN8
Plastic Disposal = 960Kg CO₂ per ton
Source: South African Journal of Science & CRDC Delta Risk LCA
Mined Aggregate/Sand = 210Kg CO₂ per ton
X 3.3 (RESIN8 replacement volume)
Source: Climate Trace and <https://github.com/climate TRACE/coalition>
One ton of CO₂ occupies 556.2m³ of volume
Source: <https://www.icbe.com/carbon/database/CO2volume/calculation.asp>



DUKATHOLE
Cement bricks, blocks and pavers



Western Cape
Government



THIS IS ONLY
THE BEGINNING.
OUR REGENERATIVE
IMPACT SO FAR.

RESIN 8



TOTAL RESIN8™
749 186kg



TOTAL MIXED
PLASTIC WASTE
SEQUESTERED:
614 318kg



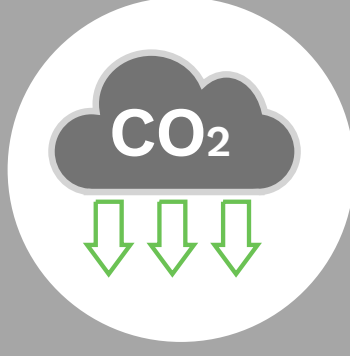
TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
24 572 720
PET BOTTLES*
*calculated @ 25g per empty bottle



TOTAL PLASTIC
SEQUESTERED
EQUAL TO:
307 159 000
CHIP PACKETS*
*calculated @ 2g per empty packet
2000 chip packets per m² of paving



MINED AGGREGATE
SAVED:
2472.3Tons



CO₂ SEQUESTERED:
3931Tons or
2 186 410m³

1590 Kg CO₂ per ton of RESIN8
Plastic Disposal = 960Kg CO₂ per ton
Source: South African Journal of Science & CRDC Costa Rica LCA.
Mined Aggregate/Sand = 210Kg CO₂ per ton
X 3.3 (RESIN8 replacement volume)
Source: Climate Trace and <https://trub.com/climate/trace/coalition>
One ton of CO₂ occupies 556.2m³ of volume
Source: <https://www.icbe.com/carbon/database/CO2volume/calculation.asp>



IMPACT

— CALCULATOR —

Take the first step towards innovative
green building technology with our
RESIN8™ IMPACT CALCULATOR

[CLICK HERE TO EXPLORE THE CALCULATOR](#)

ROOTED IN GREEN CROWNED IN GOLD

THE BAG THAT BUILDS & SA RUGBY IMPACT REPORT 2025

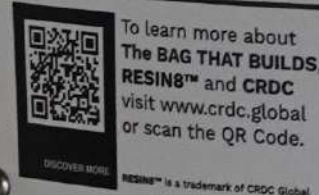


LET US ALL TACKLE PLASTIC WASTE & BUILD A STRONGER SOUTH AFRICA TOGETHER.



All **Plastic** • One **Bag** • Zero **Waste**

Plastic bottles, chip packets, plastic bags, straws, polystyrene punnets, sweet wrappers...you get the picture. At CRDC MATERIALS SOUTH AFRICA we take all types of plastic waste and convert it into a valuable eco-aggregate called **RESIN8™** which is used in various concrete products in the construction of homes, commercial buildings and roads in our Communities. Please place All your plastic waste into the The Bag That Builds bags and bins provided.



IN COLLABORATION WITH:



BACKGROUND:

CRDC Materials South Africa has collaborated with SA Rugby in Cape Town since 2022 to collect waste plastic through The Bag That Builds programme at major rugby events.

Since its inception, we collected plastic waste at the Springboks vs Wales game in 2022, RWC7s 2022, HSBC Sevens 2022, WXV 2023, World Rugby U20 Championship 2023, HSBC Sevens 2023, World Rugby U20 Championship 2024, WXV 2024, HSBC Sevens 2024, Challenger Series 2025 and now The 2025 incoming Springbok Series and The 2025 Rugby Championship.

World Rugby, in collaboration with the South African Rugby Union (SA Rugby) and CRDC Materials South Africa where bestowed with the inaugural CLIMATE ACTION AWARD by the International Olympic Committee (IOC) for this initiative in 2024.

The Bag That Builds' success was also recognised by World Rugby with the 2024 Rugby for All Award, which honours those who embody rugby's core values: discipline, integrity, passion, respect, and solidarity – by making a positive social or environmental impact.

The following report examines the outcomes and impact of the collaboration between TBTB and SA Rugby across the 2025 Incoming Springbok Series and the 2025 Rugby Championship.

The ongoing goal is to make SA Rugby matches - and ultimately all sporting events in South Africa - zero plastic waste to landfill and build a stronger South Africa together.



International
Olympic
Committee

CLIMATE ACTION
AWARDS 2023





6
STADIUMS

6
CITIES

6
PROVINCES

317 700
FANS

7
MATCHES





PLASTIC
WASTE
RECOVERED
8 262kg



NUMBER OF
TBTB BAGS
4860



EQUAL TO
NUMBER OF
PET BOTTLES
PET BOTTLES @ 25g per bottle
330 480



PLASTIC
WASTE PER
SPECTATOR
26.0Grams



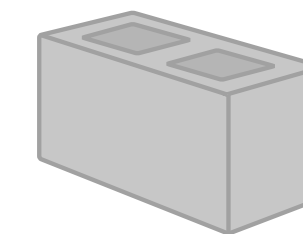
BEER CUPS
COLLECTED*
244 416
*Estimated by plastic type collected at
the two Cape Town matches only



CASUAL
JOBS
CREATED
176



ENRICHED
INTO
9836kg
RESIN8®



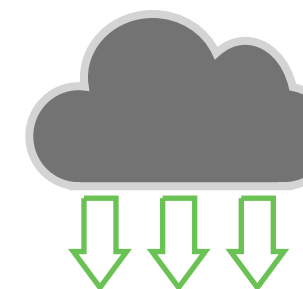
APPRECIATED
INTO
34 633
M140 BLOCKS
284g RESIN8 PER BRICK



BUILT
INTO
34x40m²
BNG HOUSES



MINED
AGGREGATE
SAVED
32.5Tons



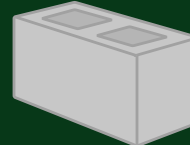
CO₂
SEQUESTERED
15 639kg
OR
8695M³

1590 Kg CO2 per ton of RESIN8
Plastic Disposal = 960Kg CO2 per ton
Source: South African Journal of Science & CRDC Costa Rica LCA
Mined Aggregate/Sand = 210Kg CO2 per ton
X 3.3 (RESIN8 replacement volume)
Source: Climate Trace and <https://github.com/climatecoalition>
One ton of CO2 occupies 556.2m³ of volume
Source: <https://www.icba.com/carbondatabase/CO2volume/calculation.asp>



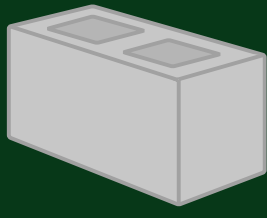


THE BAG THAT BUILDS IMPACT TOTALS 2022 TO 2025

RUGBY MATCH OR TOURNAMENT	 PLASTIC WASTE RECOVERED	 NUMBER OF BAGS @1.7Kg per bag	 RESIN8®	 NUMBER OF M140 BLOCKS*	 NUMBER BNG 40m² HOMES*
SPRINGBOKS VS WALES 2022	729Kg	429	868Kg	3499	3.0
RWC SEVENS 2022	1 051Kg	618	1251Kg	5045	4.3
HSBC SEVENS 2022	1 540Kg	906	1833Kg	7392	6.3
WOMENS WXV 2023	700Kg	412	834Kg	3361	2.9
WR U20 CHAMPIONSHIP 2023	1 172Kg	689	1395Kg	5626	4.8
HSBC SEVENS 2023	821Kg	482	977Kg	3940	3.4
WR U20 CHAMPIONSHIP 2024	1 546Kg	909	1840Kg	7421	6.4
WOMENS WXV 2024	488Kg	287	581Kg	2342	2.0
HSBC SEVENS 2024	2 209Kg	1299	2629Kg	10 602	9.1
CHALLENGER SERIES 2025	375Kg	221	447Kg	1802	1.5
INCOMING SERIES 2025	3 730Kg	2194	4440Kg	17 905	15.3
THE RUGBY CHAMPIONSHIP 2025	4 532Kg	2665	5395Kg	21 755	18.6
HSBC SEVENS 2025	3 900Kg	2294	4634Kg	18 696	16.0

* EQUIVALENT TO

 PLASTIC WASTE RECOVERED	 NUMBER OF BAGS @1.7Kg per bag	 EQUAL TO NUMBER OF PET BOTTLES PET BOTTLES @ 25g per bottle
22 793Kg	13 405	847 480

 RESIN8™	 NUMBER OF M140 BLOCKS*	 NUMBER BNG 40m² HOMES*
27 126Kg	109 388	94

* EQUIVALENT TO



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