

Guide for professionals



People and Technologies making a difference

Premier Tech brings to life products that help feed, protect, and improve our world:

- founded in 1923
- family business
- 2,715 team members in North America
- 5,000 team members worldwide in 28 countries
- 24 manufacturing facilities in North America
- 47 factories in 16 countries



Through its Water and Environment business group, Premier Tech is a world leader in designing and manufacturing sustainable local solutions for:

Wastewater treatment

Residential



Commercial



Rainwater harvesting



Together, we make green technologies accessible and continuously innovate to create solutions that last.

Premier Tech's 360° support

Since 1995, professionals have been the heart of our business.

IMMEDIATE ASSISTANCE

Experts available Monday to Friday to answer your field questions.



IN-PERSON FIELD SUPPORT

Experts go on site when challenges cannot be resolved with a video call.





ACCESSIBLE TRAINING

Online training programs make your installations as simple as possible.





MOST COMPLETE WARRANTY IN THE INDUSTRY

Since 1995, we have proudly developed sustainable products with warranties that are clear and complete.





AFTER-SALES SERVICE FROM THE MANUFACTURER

Largest network of local partners to maintain systems and honour warranties.



PRO SPACE

Quickly find all the documents you need in one place.

- installation guides
- technical data sheets
- · technical drawings
- and more

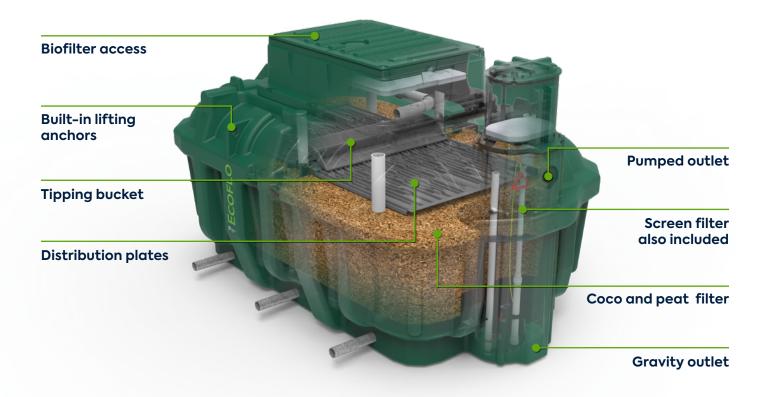


FULL CUSTOMER SUPPORT

Our teams directly assist customers, so you can concentrate on your work.

Ecoflo is how we make a sustainable difference. Together.

Join us in the movement to make the world a better, more sustainable place. Protect your client's property and the environment by recommending the Ecoflo biofilter, the most eco-responsible septic system available.



THE #1 COMPACT FILTER CHOICE!

VISIT OUR WEBSITE



QUICK INSTALLATION

- ready-to-use models
- easy-to-follow instructions
- troubleshooting by our experts

> MODELS FOR ANY SITE

- options for all soil conditions
- pumped or gravity discharge
- compact models

> PRODUCT AVAILABILITY

- 14 depots across Ontario
- quality-controlled inventory
- reliable order tracking

> 10-YEAR TOTAL WARRANTY

- all treatment-related parts and labour
- proper functioning of the filtering medium and its treatment performance
- no clogging or excess sludge

OUTPERFORMS STANDARDS

| CAN/BNQ Standard 3680-600 | | | | | |
|---------------------------|----------------|----------------------------|------------|--|--|
| Parameter | Class B-IV | Ecoflo Biofilter Effluent† | | | |
| Parameter | Requirement* | Demand Dose | Timed Dose | | |
| TSS | ≤ 10 mg/L | 3 mg/L | 4 mg/L | | |
| CBOD₅ | ≤ 10 mg/L | 4 mg/L | 4 mg/L | | |
| Fecal coliforms | No requirement | _ | _ | | |

^{* 30-}day average.

 $^{^{\}scriptscriptstyle \dagger}$ With coco and peat filtering medium.



Ecoflo advantages for your clients

NATURAL AND **COMPOSTABLE FILTER**

Our system removes pollutants with a bi-layer filter made of coconut husk fragments and peat. Both materials are natural and compostable, and coco is 100% renewable.



INSTALLED FOR LIFE

- · easy installation
- never needs to be moved or replaced
- never damages your client's landscaping

PEACE-OF-MIND **PERFORMANCE**

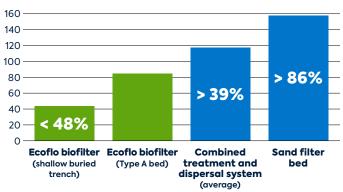
• 24/7 autonomous operation • never clogs your client's soil



LOWEST CARBON FOOTPRINT

From production and shipping to installation, maintenance, and usage, the Ecoflo biofilter has the lowest carbon footprint of any product on the market.

Total after 50-year life cycle



Notes

- · Based on analysis of septic installations in Ontario.
- Systems installed in soil with percolation rate of 30 min/cm and rated for four bedrooms.
- Distances between installations and required materials assumed to be 60 km for filtration sand and stone, 33 km for backfill.
- Ecoflo biofilter installations include two possible scenarios for final dispersal: final dispersal to Type A dispersal bed or final dispersal to shallow buried trench.
- CO₂ emissions for transport of filtering media, dispersal aggregates, and backfill.

BEST LONG-TERM INVESTMENT

- maintains the selling value of your client's property
- no energy bills for wastewater treatment
- no high-priced repairs or hidden costs
- no full-system replacements



A product supported by the manufacturer

INFO-SHARING VISIT

After each installation, we visit new owners on site to teach them how the Ecoflo biofilter works, answer their questions, and make sure their septic system is working perfectly.

ANNUAL MAINTENANCE

We have a province-wide network of partners, annually trained by us to maximize the life of your client's filtering medium and to protect their investment in their septic system.

- 15-point inspection
- filter aeration to promote healthy bacterial activity
- filter scarification to ensure optimal biofiltration

FILTER REPLACEMENT

By having the filtering medium in their Ecoflo biofilter replaced after 10 to 15 years, your client guarantees their system always protects their property and the environment.

- no excavation required
- no damage to your client's landscaping
- used filters are 100% compostable (unlike petroleum-based filtering media)





MAINTENANCE FEES 2022

| Maintenance | Fee (Excludes Taxes) | Discount | |
|--|----------------------|-------------------------------------|--|
| Ecoflo biofilter (Media for Life) | \$243 | | |
| Double installation | \$446 | \$10 early bird discount available* | |
| Triple installation | \$627 | | |
| Filtering medium replacement (Media for Life)† | \$1,200 | _ | |

* \$5 discount for renewals made before January 1, plus \$5 discount for pre-authorized payments.
† Applicable only if the system was regularly maintained by approved service providers.

ECOFLO®

Polyethylene

Solution for:

- 2,810 L/d maximum capacity
- sites with limited space
- simple and quick installations

Advantages:

- ready to use
- compact and lightweight
- integrated pumping chamber
- Type A dispersal bed directly under the tank (perforated bottom only)



Concrete

Solution for:

- 3,250 L/d maximum capacity
- all soil types
- high water tables

Advantages:

- high-strength tank
- install in groundwater up to the inlet pipe (pumped models only)
- one riser of 200 mm (8") allowed



Fibreglass

Solution for:

- 2,890 L/d maximum capacity
- sites with limited space
- remote locations

Advantages:

- Type A dispersal bed directly under the tank
- minimal final footprint
- compact and lightweight



Shallow buried trench (SBT)

Considering final dispersal with a shallow buried trench? See why the Ecoflo biofilter is the perfect match!

> EASY TO DESIGN AND INSTALL

NO ADDITIONAL STORAGE TANK

> SOLUTIONS FOR ANY SITE



Sustainability

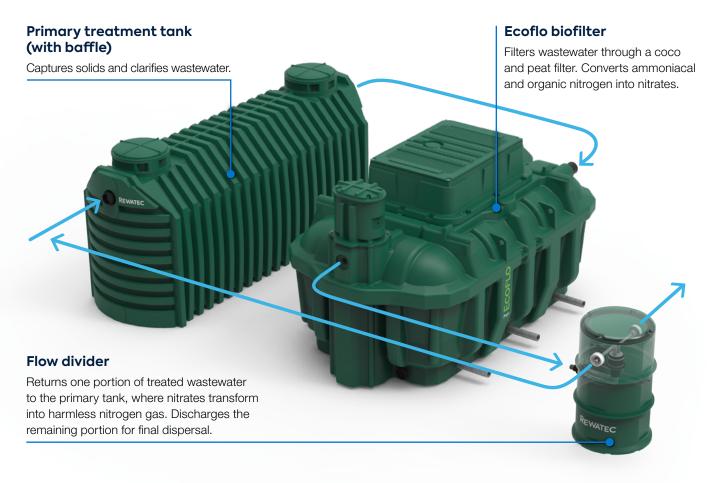
SBTs use less than half of the aggregates and sand required for a Type A dispersal bed.

Simplicity

By design, the Ecoflo biofilter already provides the internal dosing capacity required for an SBT.

Nitrogen reduction (ECDn)

Our nitrogen reduction option converts ammoniacal nitrogen into nitrogen gas, so you can safely discharge wastewater near ecologically sensitive areas.



COMPACT SIZE

Our nitrogen reduction option is ideal for sites with limited installation space.

SOLUTIONS FOR ANY SITE

Nitrogen reduction is available with many polyethylene and concrete Ecoflo biofilter models.

TREATMENT RESULTS

| Parameter | NSF Effluent Standard | ECDn Effluent | |
|--------------------------|-----------------------|---------------|--|
| TSS | < 30 mg/L | 2 ± 2 mg/L | |
| CBOD₅ | < 25 mg/L | 4 ± 3 mg/L | |
| Total nitrogen reduction | > 50% | 54% | |
| рН | 6 to 9 | 7.1 | |

Components and accessories

SEPTIC TANKS

- up to 6,600 L total nominal capacity
- high-strength polyethylene

Refer to page 22 for technical information.



PUMPING STATIONS

• up to 255 L effective dosing volume

Refer to page 23 for technical information.



PUMPS

- up to 0.5 hp
- reliable and durable

Refer to page 23 for technical information.



FLOW DIVIDERS

- pressurized or gravity flow
- two to 10 outlets



RISERS

• from 150 to 355 mm (6" to 14")

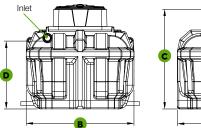


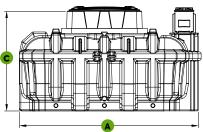
Polyethylene

Perforated tank bottom



| | ST-570P | ST-730P |
|--|---------------------|---------------------|
| Hydraulic capacity with demand dose | 1,755 L/d | 2,250 L/d |
| Hydraulic capacity with time dose | 2,200 L/d | 2,810 L/d |
| Length | 3,380 mm (11' 1") | 4,130 mm (13' 7") |
| Width | 2,000 mm (6' 7") | 2,050 mm (6' 9") |
| Height C | 1,850 mm (6' 1/2") | |
| Inlet height from bottom | 1,260 m | m (4' 2") |
| Riser height allowed | No risers allowed | |
| Weight Includes internal components and filtering medium | 1,120 kg (2,460 lb) | 1,355 kg (2,909 lb) |





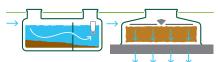
Water inlet

Ø 100 mm (4") nominal

TYPICAL INSTALLATIONS

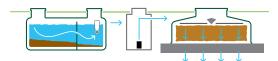
Demand-dose influent

Direct infiltration to Type A dispersal bed



Time-dose influent

Direct infiltration to Type A dispersal bed



Polyethylene

Watertight tank bottom



| | STB-570P | STB-570PR | STB-730P | STB-730PR | |
|--|---------------------|------------|------------|------------------|--|
| Hydraulic capacity with demand dose | 1,75 | 5 L/d | 2,250 | 0 L/d | |
| Hydraulic capacity with time dose | 2,20 | 0 L/d | 2,810 | 0 L/d | |
| Length | 3,380 m | m (11' 1") | 4,130 mr | n (13' 7") | |
| Width | 2,000 m | ım (6' 7") | 2,050 m | m (6' 9") | |
| Height C | 1,850 mm (6' 1") | | | | |
| Inlet height from bottom | 1,260 mm (4' 2") | | | | |
| Gravity water outlet height | 76 mm (3") | _ | 76 mm (3") | _ | |
| Pumped water outlet height Ep | — 1,240 mm (4' 1") | | _ | 1,240 mm (4' 1") | |
| Riser height allowed | | No risers | allowed | | |
| Weight Includes internal components and filtering medium | 1,200 kg (2,640 lb) | | 1,415 kg | (3,120 lb) | |
| Dosing volume | - 870 L | | _ | 1,120 L | |
| Total emergency storage capacity | - 4,370 L | | _ | 6,030 L | |

Water inlet

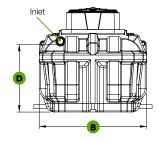
Ø 100 mm (4") nominal

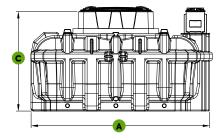
Gravity water outlet

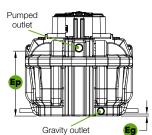
Ø 100 mm (4") nominal

Pumped water outlet

Ø 25 mm (1") nominal







TYPICAL INSTALLATIONS

Demand-dose influent

Gravity discharge to Type A or B dispersal bed, or shallow buried trench



Pumped discharge to Type A or B dispersal bed, or shallow buried trench



Time-dose influent

Gravity discharge to Type A or B dispersal bed, or shallow buried trench



Pumped discharge to Type A or B dispersal bed, or shallow buried trench



ECOFLO®

Concrete

Closed tank bottom



| | STB-650B | STB-650BR | STB-840B | STB-840BR | |
|---|-------------------------|-------------------------|--------------------------|---------------------------|--|
| Hydraulic capacity with demand dose | 2,00 | 2,000 L/d | | 2,600 L/d | |
| Hydraulic capacity with time dose | 2,50 | 0 L/d | 3,250 L/d | | |
| Length | 3,800 m | m (12' 6") | 4,910 mr | m (16' 2") | |
| Width | 1,960 mm | (6' 5-1/2") | 2,097 mm (6' 10-1/2") | | |
| Height C | 1,820 ו | mm (6') | 2,025 mm | (6' 7-3/4") | |
| Inlet height from bottom | 1,250 | mm (4') | 1,431 m | m (4' 8") | |
| Gravity water outlet height | 150 mm (6") | _ | 152 mm (6") | _ | |
| Pumped water outlet height | _ | 1,340 mm (4' 5") | _ | 1,496 mm (4' 10-9/10") | |
| Riser height allowed | 200 mm (8") | | | | |
| Tank weight | 4,000 kg (11,000 lb) | | 6,850 kg | 6,850 kg (15,100 lb) | |
| Filtering medium and internal components weight | 400 kg (880 lb) | | 450 kg (1,000 lb) | | |
| Top slab weight | 1,815 kg | (4,000 lb) | 2,815 kg (6,000 lb) | | |
| Total weight Includes tank, top slab, internal components, and filtering medium | 7,200 kg (15,880 lb) | 7,210 kg (15,900 lb) | 10,115 kg (22,300 lb) | 10,125 kg (22,320 lb) | |
| Dosing volume | | 300 L | | 500 L | |
| Retention volume Between bottom of filtering medium and base of tank | _ | 950 L | _ | 2,000 L | |

Water inlet

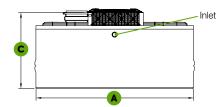
Ø 100 mm (4") nominal

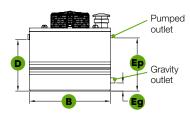
Gravity water outlet

Ø 100 mm (4") nominal

Pumped water outlet

Ø 25 mm (1") nominal





TYPICAL INSTALLATIONS

Demand-dose influent

Gravity discharge to Type A or B dispersal bed, or shallow buried trench

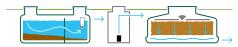


Pumped discharge to Type A or B dispersal bed, or shallow buried trench



Time-dose influent

Gravity discharge to Type A or B dispersal bed, or shallow buried trench



Pumped discharge to Type A or B dispersal bed, or shallow buried trench



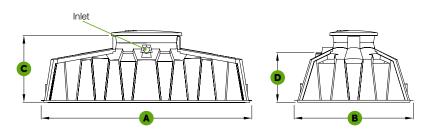
Fibreglass

Open tank bottom



| | ST-500 | ST-650 | ST-750 | |
|-------------------------------------|---|-----------------|-----------------|--|
| Hydraulic capacity with demand dose | 1,600 L/d | 2,000 L/d | 2,310 L/d | |
| Hydraulic capacity with time dose | 2,000 L/d | 2,500 L/d | 2,890 L/d | |
| Length | 3,345 mm (11') 4,175 mm (13' 8") 4,675 mm (18 | | | |
| Width | 2,361 mm (7' 9") | | | |
| Height C | 1,320 mm (4' 4") | | | |
| Inlet height from bottom | 970 mm (3' 2") | | | |
| Riser height allowed | No risers allowed | | | |
| Weight | 115 kg (250 lb) | 135 kg (300 lb) | 145 kg (320 lb) | |

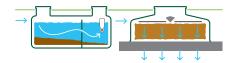
Water inlet
Ø 100 mm (4") nominal



TYPICAL INSTALLATIONS

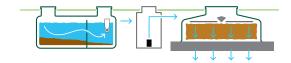
Demand-dose influent

Direct infiltration to Type A dispersal bed



Time-dose influent

Direct infiltration to Type A dispersal bed



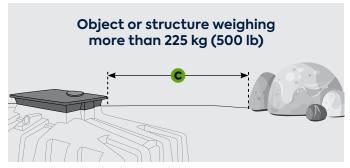
Recommended distances

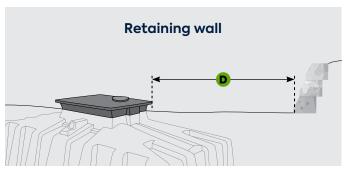
We recommend the following distances guidelines. Failure to abide by these guidelines may void the warranty of the installation.

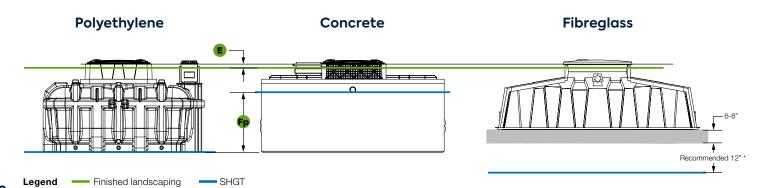
| Reference Points | Polyethylene | Concrete | Fibreglass | |
|---|-------------------------------|----------------------------|-------------------------------|--|
| Base of excess backfill, slopes, or embankments vs. biofilter lid | 4 m (13') | 3 m (10') | 5 m (16') | |
| Parking area vs. biofilter lid | 4 m (13') | 3 m (10') | 5 m (16') | |
| Object or structure weighing more than 225 kg (500 lb) vs. biofilter lid | 4 m (13') | 3 m (10') | 5 m (16') | |
| Retaining wall vs. biofilter lid | 4 m (13') | 3 m (10') | 5 m (16') | |
| Finished landscaping vs. base of biofilter lid | 50 mm (2") | | | |
| Tree vs. biofilter lid | — 3 m (10') | | | |
| Seasonal high groundwater table (SHGT) vs. base of gravity-discharge unit | Do not install in groundwater | | | |
| Seasonal high groundwater table (SHGT) vs. base of pumped-discharge unit | Do not install in groundwater | Up to bottom of inlet pipe | Do not install in groundwater | |





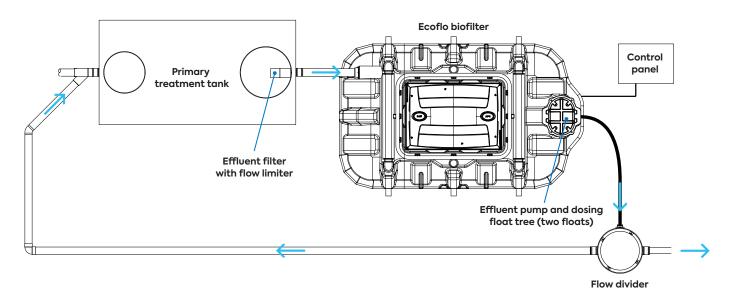






Nitrogen reduction (ECDn)

TYPICAL INSTALLATION



ECOFLO COMPATIBILITY

Polyethylene

| Hydraulic Capacity | Polyethylene Model |
|--------------------|--------------------|
| 1,755 L/d | ECDN-1755-P |
| 2,250 L/d | ECDN-2250-P |

Concrete

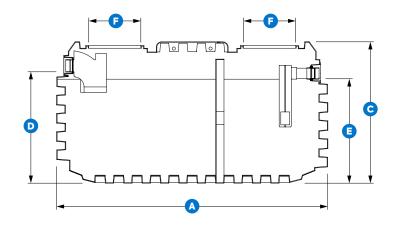
| Hydraulic Capacity | Polyethylene Model |
|--------------------|--------------------|
| 2,600 L/d | ECDN-2500-C |

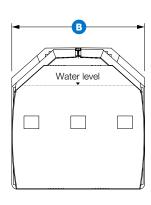
Septic and holding tanks



| | | Septio | Tank with Effluent | Filter | Holding Tank* |
|---------------------------------------|--------------------|-----------------------|--|-----------------|----------------------|
| | | PST-420 | PST-500 | PST-660 | PHT-660 |
| Total nominal capacity (holding tank) | | 4,300 L | 4,800 L | 6,68 | 50 L |
| Liquid capacity (septic tank) | A | 3,600 L | 4,100 L | 5,800 L | 5,900 L |
| Length | B | 3,777 mm (12' 4-3/4") | 2,920 mm (9' 7") | 3,965 r | nm (13') |
| Width | G | 1,250 mm (4' 1-1/4") | 1,330 mm (4' 4-3/8") | | |
| Height | D | 1,330 mm (4' 4-3/8") | 30 mm (4' 4-3/8") 1,720 mm (5' 7-3/4") | | 1,890 mm (6' 2-3/8") |
| Inlet height | B | 1,055 mm (3' 5-1/2") |) 1,400 mm (4' 7-1/8") | | |
| Outlet height | 980 mm (3' 2-1/2") | | 1,320 mm (4' 4") | | _ |
| Openings diameter | | | 470 mm (1' 6-1/2") | | |
| Weight | | 240 kg (529 lb) | 265 kg (584 lb) | 325 kg (717 lb) | 350 kg (772 lb) |
| Certification | | CSA | BNQ/CSA | BNQ/CSA | CSA |

 $^{^{\}star}$ Certified for certain applications by Health Canada's Health Products and Food Branch.





Pumping stations



| | | PSA-240 | PSA-240H | |
|-----------------------------------|----------|-------------------------------------|----------------------|--|
| Pump | | 120 V | | |
| Float | | On/off pump switch and alarm switch | | |
| Length of base | A | 950 mm (3' 1-1/2") | | |
| Width of base | В | 865 mm | 1 (2' 10") | |
| Height | G | 1,270 mm (4' 2") | 1,625 mm (5' 4") | |
| Inlet height | D | 635 mm (2' 1") | 1,060 mm (3' 5-3/4") | |
| Outlet height | 3 | 1,015 m | m (3' 4") | |
| Riser height allowed | | 710 mn | ı (2' 4") | |
| Weight | | 50 kg (110 lb) | 56 kg (123 lb) | |
| Effective dosing volume | | 150 L | 255 L | |
| Total volume At water inlet level | | 240 L | 400 L | |

Water inlet

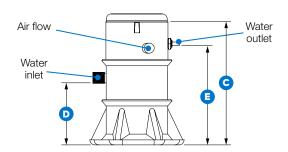
Ø 100 mm (4") nominal

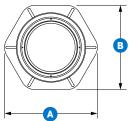
Water outlet

Ø 38 mm (1-1/2") or Ø 50 mm (2") nominal

Air flow

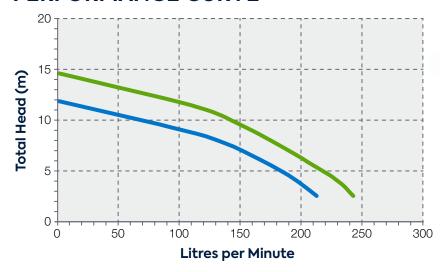
Ø 100 mm (4") nominal





Pumps

PERFORMANCE CURVE





Legend

- Champion 0.4 hp pump
 (with Ecoflo biofilter and pumping station)
 6.6 A, 1 phase, 60 Hz, 115 V
- Champion 0.5 hp pump8.5 A, 1 phase, 60 Hz, 115 V



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Making a difference for water and the environment

At Premier Tech, People and Technologies connect in lasting, transformative ways, giving life to products and services that help feed, protect, and improve our world.

Our team of experts constantly innovates, redefining what is possible through effective, efficient, and sustainable solutions. Driven by a shared passion, we are committed to protecting our resources for the future.



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