

CHOOSING THE RIGHT SEDIMENT CONTROL FOR THE JOB

More control isn't always better. Less control isn't always enough.



One of the biggest opportunities to improve erosion and sediment control outcomes is ensuring the selected control matches the actual site conditions. In the field we regularly see three common situations that cost time and money and increase risk.



INCREASED
COST



CAUSES
DELAYS



INCREASES
RISK

1. OVER-SPECIFICATION

WHEN A SILT FENCE ISN'T NEEDED

A silt fence was specified on top of a bank where runoff could not reach the control.



Control located outside the natural flow path.

✗ THE RESULT

- Extra installation cost
- Ongoing maintenance
- No meaningful sediment interception

✓ THE LESSON

Always identify where water will actually flow before selecting a control.

2. UNDER-SPECIFICATION

WHEN A SILT FENCE ISN'T ENOUGH

A standard silt fence was expected to manage runoff from a large contributing catchment.



Significant water ponding behind the silt fence.

⚠ THE RISK

- Increased risk of overtopping
- Fence failure
- Sediment discharge
- Increased maintenance

✓ THE LESSON

As a catchment size increases, additional controls are often required.

RIGHT SPECIFICATION?

STANDARD OR SUPER SILT FENCE?

Using the right type of fence makes a big difference to performance and cost.

STANDARD SILT FENCE

Best suited for:

- Smaller catchments
- Sheet flow
- Lower flow velocities
- Perimeter controls

Advantages:

- Lower installation cost
- Faster installation
- Easier maintenance

SUPER SILT FENCE

Best suited for:

- Large catchments
- Higher runoff volumes
- Increased flow capacity
- Higher risk discharge areas

Advantages:

- Greater strength
- Increased sediment retention
- Better performance under higher loads



HOW TO CHOOSE THE RIGHT CONTROL

IDENTIFY FLOW PATHS



1. Where will the water actually flow?

ASSESS CATCHMENT



1. How large is the contributing catchment?

UNDERSTAND FLOW



1. Is the flow sheet flow or concentrated?

MATCH THE CONTROL



1. Select the most appropriate control for the risk

REVIEW & MAINTAIN



1. Inspect regularly and maintain controls

COMMON MISTAKE



Installing Super Silt Fence where site conditions do not justify the additional specification.

Match the control to the site conditions, not the other way around.

QUICK SITE CHECKLIST

- Where will the water actually flow?
- How large is the contributing catchment?
- Is it sheet flow or concentrated flow?
- Is a standard silt fence sufficient?
- Would super silt fence provide additional benefit?
- Is a bund or diversion drain required?
- Is a sediment retention pond required?
- Has someone visited the site to assess the requirements?
- Is there a ESCP?



OVER A DECADE OF FIELD EXPERIENCE



Since 2014 ESCS has been installing erosion and sediment controls across AKL, WKO & BOP

We've worked on thousands of projects including residential developments, infrastructure, quarries, subdivisions industrial sites and more.

In that time we've seen what works, what doesn't, and the common challenges that affect project compliance, environmental outcomes and construction costs.



OUR COMMITMENT

We're here to help contractors, developers, engineers and environmental teams make informed decisions, reduce risk, save money and keep sediment on site where it belongs