

Proud to be producing environmentally sustainable building products.....





### Niagara Kennington

- Sawmill
- Kiln Drying
- Timber Grading, Dressing, & Packaging
- Remanufacturing Creation of Finger Jointed Blanks





## Niagara Kennington

- Primary focus of sawmill is to generate timber for our remanufacturing factory which produces finger jointed blanks.
- The finger jointed blanks are either exported to USA or manufactured into quality timber products at our Ashburton plant.
- Any Timber not appropriate for remanufacturing is used for Outdoor Timber, sold domestically to pallet manufacturers, or exported to Asia.

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# Finger Jointing







www.niagara.net.nz





www.niagara.net.nz









#### Niagara Ashburton

- Primary focus is to refine finger-jointed blanks produced at Kennington into:
  - The Envira Weatherboard System.
  - Window Reveals, Door Jambs, Mouldings
  - Finger Jointed Fascia
  - Trim Boards, Edge Glued Wide Boards
  - Laminated Posts & Beams

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- All Niagara timber product is produced from environmentally sustainable plantation grown radiata pine – sourced locally.
- Where other building materials increase CO2 levels through the production process - Niagara timber production actually has a negative carbon footprint. Each 1 tonne of wood produced removes up to 1.7 tonnes of CO2.
- Niagara is committed to whole log utilisation with all production bi-products used in everything from compost to briquettes and chip fuel.

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#### Whole Log Utilisation

- High grade clear timber used for furniture manufacturing
- Med grade timber suited to finger jointing
- Low grade timber suited to pallet and bin manufacturing plus packaging NIAGARA ACOL





### Whole Log Utilisation

- Bark and sawdust used for gardening products
- Sawdust blended with chip to run Niagara Kilns
- Shavings have a range of uses from animal bedding to briquettes
- Chip Used to manufacture MDF & the ultimate clean burning fuel







- Niagara produces a significant volume of chip
  - Chip from the sawmill approximately 20,000m3 per month
  - Chip from the remanufacturing operation approximately 2,000 m3
  - per month
  - We blend a mix of wet and dry chip to get the ultimate moisture content for boiler fuel
  - Niagara also has a whole log chipping plant capable of turning low grade pulp logs into chip.
  - Niagara has significant capacity to provide large amounts of chip as boiler fuel to the Southland Region!!











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### Why Choose Wood Chip?

- Wood Chip is either Carbon Neutral or has a negative carbon footprint
- No waste disposal issues produces about 5% of the ash of coal
- Niagara woodchips are a renewable fuel source as it is a bi-product from sustainable forestry practices
- 12 m3 of chip can produce similar levels of heat as 1000 litres of oil
- If boiler is well maintained they will produce substantially less smoke



### Why Choose Wood Chip?

- Wood Chip has a negligible sulphur content, so it's combustion does not contribute to the atmospheric build-up of oxides of Sulphur (A cause of Acid Rain)
- Using wood waste from sustainable forestry increases the health of the forest resource (provides a use for culled trees and low grade pulp logs)
- Unlike fossil fuels Wood Chip is not a diminishing fuel source



## Why Niagara?

- Niagara has a proven track record of delivering quality chip
- Niagara has the chip volume to keep your boilers running
  - No supply issues.
  - Substantial capacity at Sawmill
  - Substantial capacity at Remanufacturing plant
  - A commercial chip processing machine ready to go if additional volume required
- Easy delivery via our sister business McNeil's, or Parklands for smaller loads
- We are local Only 7km from town keeping transportation costs to a minimum



# Case Study

# Splash Palace

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- Splash Palace installed an Austrian made "Binder" boiler in June 2012
- Boiler consumes 5000m3 wood chip annually.
- Decreased from 2 skips of toxic lignite ash per week to half a wheelie bin of compostable ash per week
- New system has greater output than coal boiler allowing for increased temperature for pool
- Proud to now have water vapour coming out their stack not smoke
- Significant savings in boiler maintenance plus decreased staff costs
- Decreased health and safety issues not having to handle hot coal ash



# Case Study

#### **Environment Southland**

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- Environment Southland boiler installed this winter
- So far Niagara has delivered 80m3 of 20% moisture content Chip
- We use a smaller truck for this delivery with 20m3 capacity
- New boiler very efficient uses only 5.8m3 of chip per week
- Hopper/Infeed/Auger system very efficient. With internal flick arm we can deliver 20m3 of chip in 24 minutes
- This particular bunker has a potential capacity of 60m3
- Infeed system was supplied by living energy (who also supplied boiler)
- Existing coal bunker was modified to take chip



# Thank you

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