

**TEKLE TECHNICAL SERVICES Inc.  
(TTS)**

**Presented  
By**

**Tamrat Tekle  
TTS inc.  
9527-49<sup>th</sup> Avenue  
Edmonton, AB  
CANADA  
T6E 5Z5  
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**BACKGROUND**

- **Operating since 1998**
- **ISO 17025 accredited testing lab**
- **Competent in applied biocomposite products and technology development**
- **Leader in Engineered wood composites development**



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**FACILITY**

**TESTING**



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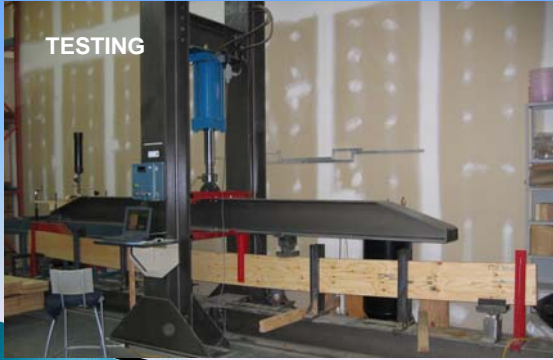
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## FACILITY

TESTING



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## FACILITY

COMPOSITES PILOT PRESS



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## FACILITY

CONTINUOUS MICROWAVE CURING

FIBRE MAT PILOT LINE



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## FACILITY



NEEDLE LOOM

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## FACILITY



SIP PILOT LINE

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## SERVICE TO THE INDUSTRY

- Product development
- Process development
- Process improvement
- QC Program deployment
- Incubator facility
  - Semi-commercial production
  - Pre-commercialization

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**SELECTED CUSTOMERS**  
(PAST & PRESENT)

- Alberta Agriculture
- Ashland Chemicals, US
- Canfor, Canada
- Domtar, Canada
- Emerson Hemp, Canada
- Hexion Speciality Chemicals, US
- Modern Laminated Timber – Russia
- Nelson Pine Industries Ltd., NZ
- Schweitzer-Mauduit, Canada
- West Fraser Mills, Canada




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**ASSOCIATIONS & ALLIANCES**

- APA - Engineered Wood
- ASTM – Committee on Wood
- Institute of Wood Science, London, UK
- International Accreditation Service (IAS)
- Strategic Alliances
  - Momentive Specialty Chemicals
  - U of A Lipids Research Group
  - Alberta Biomaterials Development Centre
  - Equipment Suppliers




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**RESEARCH INTERESTS & EXPERTISE**

**Development of value-added products utilizing agricultural fibres, forestry residue, municipal fiber waste**

- Engineered fibre mats
- Structural Insulated Panel (SIP)
- Composite Panels
- Fibre Cement Composites
- Fibre Plastic composites




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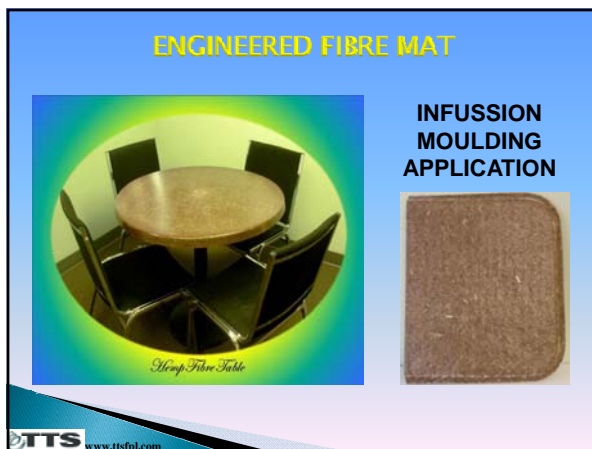
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### ENGINEERED FIBRE MAT



### CONCEPTUAL APPLICATIONS

- ❖ Acoustic dividing walls
- ❖ Exploration camps
- ❖ Sustainable emergency housing



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### STRUCTURAL INSULATED PANEL

Net-Zero Home, Drayton Valley, AB  
Energuide 84



TTS [www.starblankethomes.com](http://www.starblankethomes.com)

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### STRUCTURAL INSULATED PANEL



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## COMPOSITE PANELS



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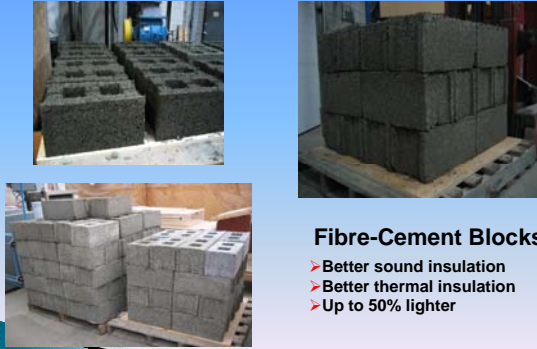
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## FIBRE CEMENT COMPOSITES



### Fibre-Cement Blocks

- > Better sound insulation
- > Better thermal insulation
- > Up to 50% lighter

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## FIBRE CEMENT COMPOSITES



### Composite Innovation Centre, Winnipeg, MN

Fibre-Cement Block Wall between mechanical room and office space

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**FIBRE CEMENT COMPOSITES**



**CONCEPTUAL APPLICATIONS**

- Landscaping
- Siding
- Roofing shingles

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**TTS – VALUE PROPOSITION**

- **TTS as a supplier**
  - Biocomposite products
  - Product/Process development
  - Composites Testing
- **TTS as a partner**
  - Open to strategic partnerships

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**THANK YOU**

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