

ENERGY FIJI LIMITED

Preferred Supplier
Of
Design, Manufacture, Testing And Supply Of
Binding And Stay WIRE

MR 125/2025

Revision History & Document Control

Rev No.	Notes	Prepared By	Reviewed & Approved By	Date of Issue
1	Prepared by	Rajiv Singh		27/07/2022
2	Reviewed by	Anishal Chandra		30/01/2025
3	Reviewed by		Mohammed Zainal Alim	

Next Scheduled Revision

This technical specification is due for review in September 2027.

TABLE OF CONTENT

Revisi	on History & Document Control	2
Next S	cheduled Revision	2
1.	Introduction And Scope Of Work	5
1	Instructions To Bidders	6
1.1	Eligible Bidders	6
1.2	Eligible Materials, Equipment and Services	6
1.3	One Bid per Bidder	6
1.4	Cost of Bidding	6
1.5	Site Visits	6
1.6	Contents of Bidding Documents	7
1.7	Clarification of Bidding Documents	7
1.8	Amendment of Bidding Document	7
1.9	Language of Bid	7
1.10	Bid Prices	7
1.11	Bid Currencies	8
1.12	Bid Validity	8
1.13	Format and Signing of Bids	8
1.14	Deadline for Submission of Bids	8
1.15	Late Bids	8
1.16	Modification and Withdrawal of Bids	8
1.17	Rejection of One or All Bids	8
1.18	Process to be Confidential	9
1.19	Clarification of Bids	9
1.20	Compliance with Specifications	9
2.	References	10
2.1.	Applicable Standard	10
3.	Service Conditions	11
3.1.	Environmental Conditions	11
3.2.	System Conditions	11
4.	Design And Construction	12
4	2. Binding Wire	1
4	3. Stay Wire	1
5	Performance And Testing	13
5.1	Type & Routine Testing	13
5.2	Type Testing	13
5.3	Testing – Stay Wires	
5.4	Testing – Binding Wires	14

	5.5	Routine Testing	14
	5.6	Acceptance Tests	14
	5.7	Witnessing of Tests	14
	5.8	Test Certificates	14
	5.9	Compliance	14
6		Reliability	15
	6.1	Service Life	15
	6.2	Evidence in Support of Reliability	15
7		Environmental Considerations	15
8		Packaging And Marking	15
	8.1	Packaging – Stay Wires	15
	8.2	Packaging – Binding Wires	15
9		Quality Requirements	16
10)	Stock Availability	16
11		Product Warranty Period	16
12	2	Information To Be Provided By The Bidder	16
	12.1	Documentation To Be Supplied With The Tender	16
	12.2	2 Samples	17
	12.3	3 Training	17
13	3	Appendix	18
	13.1	Price Schedule	18
	13.2	2 Technical Specifications – Binding Wire	19
	13.3	3 Technical Specifications – Stay Wire	19
	13.4	Submission Requirements	21

1. Introduction And Scope Of Work

Energy Fiji Limited [EFL] is responsible for generation, transmission and distribution of electricity in Viti Levu, Vanua Levu, Ovalau and Taveuni in Fiji. By the end of 2024, EFL had 223,539 customers. This includes residential, commercial and institutional customers.

EFL is requesting proposal for the Preferred Supplier to supply item listed below for EFL's operations to carry out repair, construction and maintenance of Power line Network in Fiji.

The preferred Supplier arrangement will be for a period of 3 (three) years from the date of signing of the contract.

This document outlines the technical requirements for Binding and Stay wires.

The items covered by this specification are listed below:

No.	Stock Code	Item Description	Quantity
1	I01899	Aluminium Binding Wire (2.4mm)	
2	105324	Stay Wire – Distribution (7/4mm)	
3	105314	Stay Wire – Sub-transmission (19/2.80mm)	

Table 1.1: Items Covered Under this Specification

This Specification covers the general requirements of design, manufacture, testing, supply and delivery for the binding and stay wires for use in EFL's distribution and sub-transmission networks.

1 Instructions To Bidders

1.1 Eligible Bidders

This invitation is open to all Bidders who have sound Financial Background, and have previous experience in design, manufacture, testing and supply of such aluminum binding wire and stay wire.

Bidders shall provide such evidence of their continued eligibility satisfactory to EFL as EFL shall reasonably request. Bidders who are not manufacturers of such wires shall provide evidence of agency.

Bidders shall not be under a declaration of ineligibility for corrupt or fraudulent practice.

1.2 Eligible Materials, Equipment and Services

The materials, equipment, and services to be supplied under the Contract shall have their origin from reputable companies (as specified by EFL where relevant) and from various countries and all expenditures made under the Contract will be limited to such materials, equipment, and services. Upon request, bidders may be required to provide evidence of the origin of materials, equipment, and services.

For purposes of this Contract, "services" means the works and all related services including design services.

For purposes of this Contract, "origin" means the place where the materials and equipment are mined, grown, produced or manufactured, and from which the services are provided. Materials and equipment are produced when, through manufacturing, processing or substantial or major assembling of components, a commercial recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

The materials, equipment and services to be supplied under the Contract shall not infringe or violate any industrial property or intellectual property rights or claim of any third party.

1.3 One Bid per Bidder

Each bidder shall submit only one bid. A bidder who submits or participates in more than one bid will cause all those bids to be rejected.

1.4 Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of its bid and EFL will in no case be responsible or liable for those costs.

1.5 Site Visits

Bidders can visit existing EFL networks by making arrangements to visit existing EFL installations. Bidders are required to familiarize themselves with the existing EFL installations so the solutions they offer does not require modification to existing poles and support infrastructure.

1.6 **Contents of Bidding Documents**

The bidder is expected to examine carefully the contents of this Bidding document. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the bidding documents will be rejected.

1.7 **Clarification of Bidding Documents**

A prospective bidder requiring any clarification of the bidding documents may notify EFL in writing by email, addressed to:

Jitendra Reddy Manager Procurement, Inventory & Supply Chain 2 Marlow Street. Suva. Fiii Phone: +679 331 3333 Ext 2320 or

Mobile: +679 999 2400 Email: JReddy@efl.com.fj

EFL will respond to any request for clarification which it receives earlier than 10 days prior to the deadline for submission of bids.

1.8 Amendment of Bidding Document

At any time prior to the deadline for submission of bids, EFL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by issuing addenda.

1.9 Language of Bid

The bid, and all correspondence and documents related to the bid, exchanged between the bidder and the EFL shall be written in the English language.

1.10 Bid Prices

Unless specified otherwise, Bidders shall quote for the entire facilities on a "single responsibility" basis such that the total bid price covers all the Supplier's obligations mentioned in or to be reasonably inferred from the bidding documents in respect of the design, manufacture, including procurement and subcontracting (if any), testing and delivery.

Bidders shall give a breakdown of the prices in the manner and detail called for in this bidding document, or any issued addenda.

Bids shall be given on CIF basis. The point of delivery shall be EFL's Navutu Depot in Lautoka. The term CIF shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, Paris.

EFL has a marine insurance cover for items it is required for purchase for its project and operational works. Bidders are required to comment if the marine insurance component is covered in their bids.

1.11 Bid Currencies

Prices shall be quoted in a single currency only.

1.12 Bid Validity

Bids shall remain valid for a period of **120 days** from the date of Deadline for Submission of Bids specified in Sub-Clause 21.1.

1.13 Format and Signing of Bids

The bidder shall provide one electronic copy of the Technical and Financial proposals on EFL's electronic tender hosting website; https://www.tenderlink.com/efl

The bid shall contain no alterations, omissions or additions, except those to comply with instructions issued by EFL, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

1.14 Deadline for Submission of Bids

Bids must be received by EFL at the address specified above no later than 1600 hours (Fiji Time) 16th April, 2025.

EFL may, at its discretion, extend the deadline for submission of bids by issuing an addendum, in which case all rights and obligations of EFL and the bidders previously subject to the original deadline will thereafter be subject to the deadlines extended.

1.15 Late Bids

Any bid received by EFL after the deadline for submission of bids prescribed above will be rejected.

1.16 Modification and Withdrawal of Bids

The bidder may modify or withdraw its bid after bid submission, provided that written notice of the modification or withdrawal is received by EFL prior to the deadline for submission of bids.

No bid may be modified by the bidder after the deadline for submission of bids.

1.17 Rejection of One or All Bids

EFL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the rejection.

1.18 Process to be Confidential

- 1.18.1 Information relating to the examination, clarification, evaluation and comparison of bids and recommendations for the award of a contract shall not be disclosed to bidders or any other persons not officially concerned with such process.
- 1.18.2 Any effort by a bidder to influence EFL's processing of bids or award decisions may result in the rejection of the bidder's bid.
- 1.18.3 Lowest bid will not necessarily be accepted as successful bid.

1.19 Clarification of Bids

To assist in the examination, evaluation and comparison of bids, EFL may, at its discretion, ask any bidder for clarification of its bid. The request for clarification and the response shall be in writing, but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by EFL in the evaluation of the bids.

1.20 Compliance with Specifications

The tender shall be based on the equipment and work specified and shall be in accordance with the Technical Specification. It should be noted that unless departures from specifications are detailed in Schedules of the Technical Specification, the tender would be taken as conforming to the Specification in its entirety. The Bidder shall tender for the whole of the Works included in the Specification.

2. References

2.1. Applicable Standard

The item shall be designed, manufactured and tested in accordance with the latest edition of the Standards specified below and all amendments issued prior to the date of closing of tenders except where varied by this specification.

AS 1222.1	Steel conductors and stays - Bare overhead: Part 1 – Galvanized (SC/GZ)
AS 1531	Conductors - Bare overhead – Aluminium and aluminium alloy
AS 3822	Test methods for bare overhead conductors
AS/NZS 4534	Zinc and zinc/aluminium-alloy coatings on steel wire
AS/NZS 4680	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles
AS 4068	Flat pallets for material handling
AS/NZS ISO 31000	Risk management – Principles and guidelines
AS ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
AS/NZS ISO 9001	Quality Management Systems – model for quality assurance in design,
	development, production, installation and servicing

Should inconsistencies be identified between standards and/or this specification, the tenderer shall immediately refer such inconsistencies to the EFL for resolution.

3. Service Conditions

3.1. Environmental Conditions

The Binding and Stay wires shall be designed to withstand the following service conditions.

Description		Conditions
Atmosphere	:	Saliferous, corrosive and dusty
Ambient Temperature	:	Peak: 40°C 24 Hour Average: 30°C Annual Average: 22°C Minimum: 10°C
Relative Humidity (Average)	:	85%
Rainfall	:	Annual Average: 2663mm
Isokeraunic (Thunder day) level	:	60 thunder days per year
Seismic	:	To a maximum of 7 on the open-ended Richter Scale

Note: Fiji is situated in a region where cyclones are experienced frequently. All equipment shall be designed and constructed to withstand these extreme conditions.

3.2. System Conditions

	System Voltages	
Particulars	11kV	33kV
Nominal System Voltage	11kV	33kV
Highest (Equivalent) System Voltage	12kV	36kV
Number of Phases	3	3
Impulse Withstand Voltage (peak)	28kV	70kV
Power Frequency Withstand Voltage	95kV (peak)	200kV (peak)

4. Design And Construction

Equipment offered that is found on inspection not to conform to this specification shall be replaced by the vendor at no cost to Energy Fiji Limited.

From the stock list in the introduction above, this technical specification highlights the detailed features of the Binding and Stay wires.

4.1. General Design

The stay wire shall be designed and constructed in accordance with the applicable standard as given in Clause 2. Binding wire shall be suitable for the security of the overhead conductors when attached to the supporting insulators.

4.2. Binding Wire

The binding wires must comply to the following requirements:

- To be fabricated through a process of drawing aluminum rods and annealing.
- The wire shall be suitable for securely binding the bare aluminum overhead conductors to the pin insulators and to provide positive contact with the aluminum conductor so as to avoid any shafting contacts.
- The surface of the binding wire shall be round smooth and without any sharp edges that may cause injuries.
- There must not be a need for pliers as the binding wire should be suitable for manual application in 415V, 11kV and 33kV overhead lines.
- The diameter of the binding wire shall be approximately 2.4mm. The aluminum binding wire shall be supplied in the form of coils with weight 5kg/coil.

4.3. Stay Wire

The stay wires must comply to the following requirements:

- The Stay wire is to be used as stay for providing support to structures on single circuit and / or double circuit sub-transmission and distribution lines.
- Galvanized steel wire shall be drawn from high carbon steel rods produced by either acidic or basic open Earth process, electric furnace process or basic oxygen process. All the properties of the steel strands and wires shall confirm to the relevant standards.
- The Zinc used for galvanizing shall be electrolytic high grade Zinc not less than 99.95 percent purity. It shall conform to and satisfy all the requirements of relevant ISS, BSS or other Standards to be specified with the due justification. Galvanizing has to be done by hot dip galvanizing process as per AS/NZS 4680. Neutral grease may be applied between the layers of wires, however the weight of the same shall be specified and added to the total weight of the conductor.
- The wires shall be of tensile grade 4, having minimum tensile strength of 700 N/mm2 conforming to the standard AS 1222.1.
- The wires shall be stranded in a way that in the event of equal distributed pull being applied at the ends of the entire strand, each wire must be capable of sharing the force of the pull.
- The wire shall be of circular shape and free from defects such as scale, splits and irregularities.

5 Performance And Testing

5.1 Type & Routine Testing

Prior to delivery, the items shall have completed the type, routine and accuracy tests and inspections as required by the relevant international and AS/NZS standards. The passing of such tests shall not prejudice the right of EFL to reject the items if it does not comply with the specification when received or installed.

All testing shall be undertaken by an AS ISO/IEC 17025 accredited test house. The bidder shall submit evidence showing IEC 17025 compliance. A formal report covering the outcome of the different tests shall be made available to EFL.

The various categories of products included in this specification have different test and performance requirements. Some of these requirements are in accordance with certain European and AS/NZS Standards. Where the products offered have been tested to different industry standards, the supplier shall detail the differences between the two standards, and provide a copy of the relevant parts of the standard to which the products have been tested.

Full technical information shall be provided in support of all the products offered. Where sufficient information is not provided to allow a full technical appraisal of a product, and the tenderer does not furnish such information or respond to EFL's requests for such information within a reasonable timeframe, the product involved will be regarded as technically un-assessable and will not be given any further consideration for the purpose of this tender.

Test certificates shall be provided by a NATA (or equivalent) certified testing laboratory. The testing laboratory must be certified for testing to the relevant standard for the offered products. In addition, a copy of the testing laboratories certification shall be provided. All test reports and supporting evidence shall be provided in English.

Bidders can provide type test certificates in accordance to equivalent international standards. However, this must be stated clearly in the Tender bid.

Where items of a similar design to that previously tested is offered, consideration may be given to accepting previous type test reports. Tenderers are requested to substantiate their claims of equivalent type test performance with written engineering evaluation, where full Type Test documentation is not submitted for each of the items offered. Such evaluation must provide all relevant details so that EFL can establish the validity of existing type tests.

5.2 Type Testing

Type tests shall be defined as those tests which are to be carried out to prove the design, process of manufacture and general conformity of the materials to this specification.

The supplier shall provide copies of valid and current type test reports and certificates for all of the type tests that are specified in the specifications and that have previously been performed.

Wherever the referenced test procedures or the technical specifications call for visual inspection for damage, the test report shall include a full description of observed status of the sample. (Visually inspected samples shall also be color photographed and copies of color photographs shall be included in type test report).

5.3 Testing - Stay Wires

Stay wires shall be tested in accordance with AS 1222 and AS 3822 and copies of certificated shall be submitted with the offer.

The following are tests that shall be conducted on the stay wires offered:

No.	Description of Test	Test Method Reference	
1	Routine Tests	AS 1222.1 Section 4 Clause 4.1.2	
2	Mechanical tests		
	a) Dimensional test	AS 1222.1 Section 4 Clause 4.2.1	
	b) Ultimate tensile stress test	AS 1222.1 Section 4 Clause 4.2.2	
	c) Torsion test	AS 1222.1 Section 4 Clause 4.2.3	
	d) Wrapping test	AS 1222.1 Section 4 Clause 4.2.4	
3	Coating Mass Test	AS 1222.1 Section 4 Clause 4.3	
4 Resistivity test AS 1222.1 Appendix D		AS 1222.1 Appendix D	
5	5 Lay Ratio AS 1222.1 Section 4 Clause 4.4		

5.4 Testing - Binding Wires

The Aluminium binding wires shall be tested in accordance with AS 1531 and copies of certificated shall be submitted with the offer.

5.5 Routine Testing

Routine tests are intended to eliminate defective units and shall be carried out during the manufacture of stay and binding wires. These are to be conducted in accordance to the relevant standard and copies of test certificates for each item shall be submitted with the offer.

5.6 Acceptance Tests

The EFL may carry out acceptance test on product to prove it conforms to the requirements of this Specification. Any product showing evidence of failure to comply with the requirements of this specification will be liable to rejection.

5.7 Witnessing of Tests

The bidders shall make allowance for witnessing of routine tests on a batch of stay and binding wires by two EFL Engineers at least once during the contract period. The return-air travel, accommodation, meals and other expenses related to routine test witnessing shall be borne by the bidder.

The Supplier shall give EFL not less than four (4) weeks' notice of when each and every type test will be carried out. Such witnessing shall be required once in the contract period, upon purchase of the first unit. A copy of inspection and test plan shall be submitted to EFL with the bid submission, which shall be used in the factory.

Note: The Factory Acceptance Testing (FAT) is a mandatory requirement by EFL.

5.8 Test Certificates

Two certified copies of all test results shall be supplied to EFL for every product that will be supplied under the contract.

5.9 Compliance

The Supplier shall state in writing that their offer complies with the relevant Standards and this specification. If the Supplier is offering product manufactured to an equivalent standard, full details of that standard must be given including a copy written in English.

6 Reliability

6.1 Service Life

Bidders are required to comment on the reliability of the equipment and the performance of the materials offered for a service life of 35 years under the specified system and environmental conditions in clause 3.

6.2 Evidence in Support of Reliability

Where the specified guaranteed service life is less than 35 years Suppliers are required to provide comment and submit evidence in support of the reliability and performance claimed including detailed information on Failure Mode and Effect Analysis.

7 Environmental Considerations

Suppliers are required to comment on the environmental soundness of the design and the materials used in the manufacture of the items offered. In particular, comments should address such issues as recyclability and disposal at end of service life and also disposal of packaging material.

8 Packaging And Marking

8.1 Packaging - Stay Wires

The Stay wire supplied on pallets shall be manufactured in accordance with the requirements of AS 4068. Double palleting shall not be used by the supplier.

The stay wire supplied shall be as follows:

- 1. In coils of 50m wrapped appropriately
- 2. Supplied on pallets

All pallets must be of suitable quality to withstand a minimum of twenty- four (24) months exposure to all types of weather conditions during outdoor storage without deterioration.

The following shall be clearly marked on the coils:

- 1. Manufacture's name
- 2. Manufacture's part reference number
- 3. EFL stock code
- 4. Compliance standards
- 5. Batch number
- 6. Stay wire description (strands, diameter per strand and overall diameter)
- 7. Package weight

8.2 Packaging - Binding Wires

The aluminium binding wires shall be supplied in coils considering the following:

- 1. Total weight of wire 5kg
- 2. Total mass of coil and wire not exceeding 6kg

9 Quality Requirements

Tenderers are required to submit evidence that the design and manufacture of the Binding wires and Stay wires are in accordance with AS/NZS ISO 9001 and shall include the Capability Statement associated with the Quality System Certification.

If the Tenderer is a non-manufacturing supplier, the documentary evidence shall include the quality system certifications of both the supplier and the manufacturer.

10 Stock Availability

The bidder is required to show the size of his/her stock holding and the ability to meet the required estimate quantity per annum. The movement of the Binding wires and Stay wires will depend on the EFL's project works and for operation and maintenance purposes. An estimate movement of the item is outlined in the table below but it will not be purchased as a lump sum quantity at once. Hence, the successful bidder will be required to carry a consignment / safety stock at times to meet EFL's demand within the three year contract period.

No.	Stock Code	Item Description	Approximate 3 Year Stock Movement
1	I01899	Aluminium Binding Wire (2.4mm)	2,908.58
2	105324	Stay Wire – Distribution (7/4mm)	43253
3	105314	Stay Wire – Sub-transmission (19/2.80mm)	6233

11 Product Warranty Period

The bidders are required to provide the warranty period as part of the proposal. A minimum warranty period of twenty-four (24) months from time of dispatch from factory shall be provided.

12 Information To Be Provided By The Bidder

12.1 Documentation To Be Supplied With The Tender

To enable the EFL to fully evaluate the Binding wires and Stay wires offered, (in addition to the completed Specification Requirement and Guaranteed Performance schedule) the bidder shall submit the following information with their tender: (Note these are mandatory requirements)

- List showing similar equipment supplied to or on order for other utilities in Australia or New Zealand or the Oceania region for the past 5 years
- Typical arrangement drawings and full details of the dimensions
- Type test certificates as per Clause 5.1
- End of service life disposal methods
- Evidence of Quality Management Systems used in the manufacturing process
- Evidence of Health, Safety and Environmental plans
- Evidence of financial ability to provide the level of service and support
- Origin of materials used in the manufacturing process
- Names and resumes of key team members who will be assigned to work with EFL upon successful award of the three-year supply contract (if bidder is successful)

Bidders may be asked to provide additional information during tender assessment period or following award of contract.

12.2 Samples

When requested, production samples of each item shall be submitted with the offer.

Each sample shall be delivered freight free (Delivery Duty Paid (DDP)), suitably packaged and labelled with the following information:

- Name of supplier and this contact number
- Tender number
- Any supporting data on features or characteristics

12.3 Training

Training material in the form of drawings, instructions and/or audio visuals (in CD format) are required to be provided for the items accepted under the tender. The Tenderers shall allow the cost of production and delivery of training material in the tendered prices.

The training materials should include but not be limited to the following topics:

- Handling
- Storage
- Application
- Installation
- Maintenance
- Environmental performance
- Electrical performance
- Mechanical performance
- Disposal

Offers of vendors who fail to furnish above particulars shall be rejected.

13 Appendix

13.1 Price Schedule

Bidders are required to complete the following price schedule and submit with the offer. EFL requires the biding prices to be in CIF incoterms.

No.	Stock Code	Item Description	Unit Price (CIF)	Currency of bid
1	I01899	Aluminium Binding Wire (2.4mm)		
2	105324	Stay Wire – Distribution (7/4mm)		
3	105314	Stay Wire – Sub-transmission (19/2.80mm)		

Bidders are to clearly indicate the currency of bid.

13.2 Technical Specifications – Binding Wire

Particulars	Units	Requirements	Bidders Response
Manufactures name		Bidder to state	
Place of manufacture		Bidder to state	
Origin of materials used for manufacturing		Bidder to state	
Type test certificates provided		Yes/No	
Nominal overall diameter	mm	2.4	
Material designation		Bidder to state	
Packaging Details			
Length of binding wire per coil	m	Bidder to state	
Nominal mass of binding wire	kg/km	Bidder to state	
Mass of coil	kg	5	
Total number of coils per pallet		Bidder to state	
Total weight of pallet and wire	kg	Bidder to state	

13.3 Technical Specifications – Stay Wire

Particulars	Requirements	Requirements	Bidders Response
Manufactures name			
Country of			
manufacture			
Origin of materials			
used for			
manufacturing			
Type test certificates			
provided (Yes/No)			
	Distribution	Sub-Transmission	
Material of stay wire	Galvanized steel	Galvanized steel	
Base metal for wire	Fully-killed steel as per AS 1442	Fully-killed steel as per AS 1442	
Wire coating	Zinc coating	Zinc coating	
Minimum zinc coating mass	260 g/m ²	240 g/m²	
Process for coating	Hot-dip or electrolytic and as per AS 1222.1 Section 4 Clause 4.3 and table 2.2	Hot-dip or electrolytic and as per AS 1222.1 Section 4 Clause 4.3 and table 2.2	
Purity of zinc fed into the bath if Hop-dip galvanizing process is used	Not less than 98%	Not less than 98%	
Is the wire copper plated before coating?	Bidder to state	Bidder to state	
When is the wire galvanized?	Intermediate or final stage	Intermediate or final stage	
Is grease used for additional corrosion protection?	Not required	Yes	

Drop point of grease	Not less than 120°C as per ASTM D566	Not less than 120°C as per ASTM D566	
Minimum ultimate tensile stress	700/800 MPa	1310 MPa	
Dimensional tolerances	As per AS 1222.1 table 2.1 – provide details	As per AS 1222.1 table 2.1 – provide details	
Joints in the wire	Shall comply to AS 1222.1 Clause 2.3.1	Shall comply to AS 1222.1 Clause 2.3.1	
Density of galvanized steel wire at 20°C	7.80 x 10 ³ kg/m ³	7.80 x 10 ³ kg/m ³	
Resistivity of galvanized steel wire	0.19μΩ.m at 20°C	0.19μΩ.m at 20°C	
Constant-mass temperature coefficient of resistance at 20°C	4.40 x 10 ⁻³ per °C	4.40 x 10 ⁻³ per °C	
Modulus of elasticity of galvanized steel wire	193 GPa	193 GPa	
Coefficient of linear expansion of galvanized steel wire	11.5 x 10 ⁻⁶ per °C	11.5 x 10 ⁻⁶ per °C	
Number of strands	7	19	
Diameter of each stand	4.00 mm	2.75 mm	
Approximate overall diameter	11.3 mm	13.8 mm	
Cross-sectional area	77.28 mm ²	112.9 mm ²	
Approximate Mass per km	609 kg	894 kg	
Calculated breaking load	91.3 kN	133 kN	
Equivalent Aluminum area	11 mm²	17 mm ²	
Typical D.C resistance per km at 20°C	2.5 Ω	1.7 Ω	

Name of Tenderer:	
Signature of Tenderer:	
Date:	

13.4 Submission Requirements

All tenderers are required to complete and submit a copy of the submission requirements with their bid submissions. (Note these are mandatory requirements)

Requirements	Response from Bidders
Validity of bid (120 days required) (Yes/No)	
List of test reports/certificates provided. (As per Clause 5)	
Minimum warranty period offered for this product	
Price review period	
Minimum order quantity	
Completed price and technical schedules (Clause 13.1 and 13.2)	
(Yes/No)	
The biding pricing to be in CIF incoterm.	
Currency of bid.	
Lead time of delivery after tender award.	
Disposal method after service life.	
Complete dimensional drawings	
Factory Acceptance Test	
Training	
Material safety datasheet to be provided for all items	
The bidder to include the following as part of the bid:	
Company profile, financial capability statement	
Company registration details	
Company financial capability statement	
Reference list of customers the same product is supplied to and	
contact details for reference check	
If the bidder is the manufacturer, the ISO certification shall be	
provided	
If the bidder is only the supplier of the product, then both the	
manufacturer and supplier ISO certifications shall be provided	

Name of Tenderer:	
Signature of Tenderer:	
Date:	

Tender Checklist

The Bidders must ensure that the details and documentation mention below must be submitted as part of their tender Bid

Te	nder Number	
Te	nder Name	
1.	Full Company / Business Name:	-
	(Attach copy of Registration Certificate)	
2.	Director/Owner(s):	-
3.	Postal Address:	-
4.	Phone Contact:	-
5.	Fax Number:	-
6.	Email address:	-
7.	Office Location:	
8.	TIN Number:	-
	(Attach copy of the VAT/TIN Registration Certificate - Local Bidder (Mandatory)	's Only
9.	FNPF Employer Registration Number: (For Local Bidders only) (Mandatory)
10.	Provide a copy of Valid FNPF Compliance Certificate (Mandatory- Local I	Bidders only)
11. on	Provide a copy of Valid FRCS (Tax) Compliance Certificate (Mandatory Lolly)	ocal Bidders
12.	Provide a copy of Valid FNU Compliance Certificate (Mandatory Local Bi	dders only)
13.	Contact Person:	
	I declare that all the above information is correct.	
	Name:	
	Position:	
	Sign:	
	Date:	

Tender submission

Bidders are requested to upload electronic copies via Tender Link by registering their interest at: https://www.tenderlink.com/efl

EFL will not accept any hard copy submission to be dropped in the tender box at EFL Head Office in Suva.

This tender closes at 4.00pm (1600hrs) on Wednesday 16th April, 2025.

For further information or clarification please contact our Supply Chain Office on phone (+679) 3224360 or (+679) 9992400 or email us on tenders@efl.com.fj

The bidders must ensure that their bid is inclusive of all Taxes payable under Fiji Income Tax Act. Bidders are to clearly state the percentage of VAT that is applicable to the bid prices.

The lowest bid, will not necessarily be accepted as the successful bid.

The Tender Bids particularly the "Price" must be typed and not hand written.

Any request for the extension of the closing date must be addressed to EFL in writing three (3) working days prior to the tender closing date.

Tender Submission via email or fax will not be accepted.