

# SFG Aluminium Ltd - Comprehensive Chat Extraction & Project Documentation

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**Document Version:** 1.0.0

**Generated:** October 31, 2025

**Project Path:** /home/ubuntu/sfg\_aluminium\_ltd

**Current Version:** v1.1.0

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## EXECUTIVE SUMMARY

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### Project Identity

- **Client:** SFG Aluminium Ltd (NOT SFG Innovations - strict brand separation required)
- **Scope:** 100+ page comprehensive UK aluminium and construction website
- **Primary Goals:** Lead generation, sales conversion, customer self-service
- **Target Market:** UK commercial sector (retail, leisure, education, healthcare, industrial, offices, residential/BTR, public sector)

### Critical Project Constraints

1. **Brand Separation:** MUST maintain complete independence from SFG Innovations
  - Distinct domains and email addresses
  - SFG Innovations tools ONLY accessible via /apps microfrontends
  - No group/sister company language permitted
2. **Design Theme:** Warren Executive Theme (light background, professional aesthetic)
  - White backgrounds with dark text for readability
  - SFG Aluminium brand colors: Navy (#0B1426), Platinum (#E8E9EA), Electric Blue (#00D4FF), Copper (#B87333)
  - NOT the SFG Innovations aesthetic

3. **Services Model:** Pre-Planned Maintenance (PPM) ONLY
- NO 24/7 emergency services
  - NO reactive call-out messaging
  - Focus on scheduled maintenance and preventative care

## PROJECT EVOLUTION TIMELINE

### Phase 1: Original Vision (August 2024)

**Source:** user\_message\_2025-08-11\_20-18-06.txt

#### Specifications:

- 180+ pages at launch (minimum 100)
- Microfrontends host at /apps with magic-link authentication
- Session management: 48h magic-link, 90-day session cookies
- Security: watermarked prints, no anonymous downloads
- Hosting: Vercel/Azure for SSR, proxy APIs to Azure Functions

#### Information Architecture:

Total ~180 pages **breakdown:**

- Home (1)
- Products (60) = 10 categories ☒ 6 subpages **each**
  - Categories:** shopfronts, windows, manual doors, automatic doors (BS EN 16005), fire-**exit** doors, steel doors, curtain walling, roller shutters/grilles, glazing/balustrades, accessories/hardware
  - Subpages:** overview, specifications, configurations/options, finishes/colours, compliance/testing (UKCA/PAS 24/Parts), gallery/**case** studies
- Services (7) ☒ spraying & maintenance (4), reactive repairs/**call**-outs (3)
- Sectors (8) ☒ retail, leisure, education, healthcare, industrial, offices, residential/BTR, **public** sector
- Projects & **Case** Studies (25) ☒ **index** + 24 **case** studies
- Compliance summaries (13) ☒ Parts A/B/F/K/L/M/Q/O, UKCA & DoP, testing & certifications, installer competency, document **index**
- Resources & Knowledge (23) ☒ **index** + 20 articles + FAQs + glossary
- Pricing & Quotations (4) ☒ overview, quote form, trade accounts, finance note
- About (6) ☒ company, heritage & resilience, team, accreditations, H&S, sustainability
- Contact & Support (5) ☒ contact, book a survey, book a repair, warranty & **returns**, spare parts
- Blog/News (13) ☒ **index** + 12 posts
- Careers (4) ☒ overview, openings, apprenticeships, installer network
- Legal & Policies (8) ☒ privacy, terms, cookies, modern slavery, anti-bribery, environmental, quality, H&S
- /apps microfrontends (16) ☒ gate, verify, **index**, [slug] ☒ 12 slugs

#### Product Subpage Template (Standard for all 10 categories):

- Overview: Hero + spec chips; tabs; CTAs (Quote/Survey); related case studies; gated downloads prompt
- Specifications: Spec table (sizes, U-values, glazing, hardware, thresholds); inline compliance flags (Part L/K/M/Q); CTA to /apps/spec-pack-pro
- Options & Finishes: Colour systems (RAL/BS), textures, handles/hardware, thresholds, glass types; warranty, care & maintenance
- Compliance: UKCA | PAS 24 | Part L/B/K/M/F/Q matrix; evidence (test refs, DoP numbers, installer

competency); gated docs

- Gallery/Case Studies: Project photos, customer testimonials, optional gated PDF

## Phase 2: Design Override (August 2024)

**Source:** user\_message\_2025-08-11\_23-11-30.txt

### Critical Override Directive:

"this these overrides # SFG Innovations - Aluminium Fabrication Technology Website... overrides the directive, on home page design hero, but all other parameters stay."

### What This Means:

- The SFG Innovations hero design concept (3D visualization, immersive experience) was to be applied to the hero section ONLY
- All other parameters from the original 180+ page specification remained in effect
- This created a hybrid approach: innovative hero with comprehensive site structure

### Hero Section Override Features:

- 3D Three.js visualization of aluminium products
- Interactive orbit controls
- Realistic aluminium material rendering
- Animated floating elements
- Video demonstrations
- Dynamic statistics display

## Phase 3: Content Research & Development (PDF Conversation)

**Source:** SFG Website llm chat conversation.pdf (176 pages)

### Key Content Decisions from Early Conversation:

- 1. 6-Page Foundation Website** (Initial Build):
  - Home/Welcome
  - Products & Services
  - About Us
  - Projects & Case Studies
  - Pricing & Quotations
  - Contact & Support
- 2. Content Strategy Pillars:**
  - Trust building through transparency
  - UK compliance at forefront
  - Sustainability messaging
  - Digital transformation narrative
  - Technical expertise demonstration
- 3. Emerging Tech Integration:**
  - AI-driven design automation (AutoCAD + Abacus.AI)
  - Digital twin technology for client visualization
  - IoT-enabled smart building integration
  - BIM workflow readiness
  - Automated quotation tools

#### 4. Files Referenced for Content:

- Design Prompt for SFG Aluminium Limited\_Hostinger.docx
- SFG Aluminium Logo Design.png
- Company accounts and financials
- Warren Heathcote CV Sept 2024.docx
- Technical specifications PDFs
- Pricing templates (Excel)
- Customer information documents
- Insurance and compliance certificates

## Phase 4: Current Implementation (October 2025)

**Source:** Current conversation + VERSION.md

#### Implemented Features (v1.0.0 - v1.1.0):

- Foundation website with hero section, header, footer
- Version tracking system (VERSION.md, version.ts, VersionBadge component)
- Authentication framework (API routes: signin, signup, session management)
- Advanced hero video design specification
- PPM services messaging (NO emergency services)
- Contact form, quote request form, service inquiry form
- Products, Services, About, Contact pages
- Database schema (Prisma) for contacts, quotes, service inquiries
- Universal Task Framework documentation
- Comprehensive handover documentation

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## CRITICAL SPECIFICATIONS & DECISIONS

### 1. SERVICES MODEL CHANGE

**Decision Date:** October 2025

**Critical Change:** Services messaging updated from "24/7 emergency" to "PPM only"

#### Implementation:

OLD: "24/7 Emergency Repairs & Reactive Services"  
NEW: "Pre-Planned Maintenance (PPM) Services"

#### Reasoning:

- Align with actual business model
- Set correct customer expectations
- Focus on scheduled maintenance contracts
- Preventative care emphasis

#### Pages Affected:

- /services page
- Home page services section
- Footer service links
- Service inquiry forms
- Quote request forms

## 2. VERSION TRACKING SYSTEM

**Decision Date:** October 2025

**Purpose:** Maintain continuity across agent handovers and track all changes

**Implementation:**

- VERSION.md file (markdown log)
- lib/version.ts (TypeScript export)
- components/version-badge.tsx (UI component)
- Footer display of version number

**Version Log Structure:**

```
# SFG Aluminium Ltd - Version Control

## v1.1.0 - [Date]
### Changes
- [List of changes]
### Files Modified
- [Files changed]
### Testing
- [Test results]
```

## 3. AUTHENTICATION FRAMEWORK

**Decision Date:** October 2025

**Implementation:** NextAuth.js with Prisma adapter

**API Routes Created:**

- /api/auth/[...nextauth] - Main NextAuth endpoint
- /api/auth/signin - Custom sign-in logic
- /api/auth/signup - User registration
- /api/auth/session - Session verification
- /api/auth/status - Auth status check
- /api/auth/csrf - CSRF token
- /api/auth/providers - Auth providers list

**Database Schema:**

```
model User {
  id          String    @id @default(uuid())
  email       String    @unique
  password    String
  name        String?
  role        String    @default("user")
  createdAt   DateTime  @default(now())
  updatedAt   DateTime  @updatedAt
}
```

## 4. HERO VIDEO SPECIFICATION

**Decision Date:** October 2025

**Purpose:** Create immersive, brand-appropriate hero experience

**Requirements:**

- Duration: 15-30 seconds, seamless loop

- Content focus: Aluminium fabrication, powder coating, installation
- Visual style: Warren Executive Theme (professional, not industrial gritty)
- Multiple formats for device optimization:
- Desktop: 1920×1080 (16:9)
- Tablet: 1024×768 (4:3)
- Mobile: 375×667 (9:16 portrait)
- Fallback: Poster image

#### Implementation:

- `components/advanced-hero-video.tsx` component
- Responsive video sources
- Accessibility features (pause controls, reduced motion support)
- Performance optimization (lazy loading, preload hints)

#### Video Assets Structure:

```
/public/videos/  
├── hero-desktop-1920x1080.mp4  
├── hero-tablet-1024x768.mp4  
├── hero-mobile-375x667.mp4  
└── hero-fallback.jpg
```

## 5. UNIFIED APPLICATION INVENTORY

**Decision Date:** October 2025

**Purpose:** Document all SFG ecosystem applications for /apps microfrontends

#### Scope:

- Core SFG applications (both companies)
- Microsoft 365 environment
- Business procedures documentation
- Integration points
- Access control requirements

#### Structure:

```
# Application Name  
- **Type:** [Core/Utility/Integration]  
- **Owner:** [SFG Aluminium/SFG Innovations/Shared]  
- **Platform:** [Web/Desktop/Mobile/API]  
- **Authentication:** [Method]  
- **Integration Status:** [Active/Planned/Legacy]  
- **Access Level:** [Public/Gated/Internal]
```

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## BRAND IDENTITY & DESIGN GUIDELINES

### Warren Executive Theme

**Source:** `warren_executive_theme_complete.pdf` (referenced)

#### Core Principles:

##### 1. Light Background Philosophy

- White (#FFFFFF) or off-white backgrounds
- Dark text for optimal readability
- Professional, clean aesthetic
- High contrast ratios (WCAG 2.2 AA compliant)

#### 1. **Color Palette:**

```

Primary:

- Navy: #0B1426 (text, headings, primary brand)
- Platinum: #E8E9EA (backgrounds, dividers, subtle accents)

Accent:

- Electric Blue: #00D4FF (CTAs, links, interactive elements)
- Copper: #B87333 (highlights, secondary CTAs)
- Dark Copper: #9a5e2a (hover states)

```

#### 1. **Typography:**

- Headings: Montserrat (bold, professional)
- Body: Inter (readable, modern sans-serif)
- Code/Technical: Monospace

#### 2. **Spacing & Layout:**

- Generous white space
- Clear visual hierarchy
- Grid-based layouts
- Consistent padding/margins

#### 3. **Components:**

- Rounded corners (8px, 12px, 16px)
- Subtle shadows for depth
- Smooth transitions (200-300ms)
- Hover states on interactive elements

## **Brand Separation Rules**

### **SFG Aluminium Ltd Identity:**

- Logo: SFG Aluminium Logo Design.png
- Domain: [Primary domain for SFG Aluminium]
- Email: @sfg-aluminium.co.uk (or similar)
- Services: Commercial aluminium fabrication, installation, PPM maintenance
- Tone: Professional, reliable, compliant, customer-focused

### **SFG Innovations Identity (Kept Separate):**

- Logo: SFG Innovations branding
- Domain: Separate domain (only referenced in /apps)
- Email: @sfg-innovations.com (or similar)
- Services: Technology, software, innovation tools
- Tone: Innovative, technical, cutting-edge

### **Critical Rule:**

NEVER imply group/sister relationship. SFG Innovations tools are “third-party applications” accessible via /apps, not family companies.

# TECHNICAL ARCHITECTURE

## Stack

Framework: Next.js 14.2.28 (App Router)  
Language: TypeScript 5.2.2  
Styling: Tailwind CSS 3.3.3  
UI Components: shadcn/ui (Radix UI primitives)  
Database: PostgreSQL with Prisma 6.7.0  
Authentication: NextAuth.js 4.24.11  
Package Manager: Yarn

## Project Structure

/home/ubuntu/sfg\_aluminium\_ltd/app/  
├── app/  
│ ├── page.tsx  
│ ├── layout.tsx  
│ ├── globals.css  
│ ├── about/page.tsx  
│ ├── products/page.tsx  
│ ├── services/page.tsx  
│ ├── contact/page.tsx  
│ └── auth/  
│ ├── signin/page.tsx  
│ └── signup/page.tsx  
│ └── api/  
│ ├── auth/  
│ ├── contact/  
│ ├── quote/  
│ └── service/  
├── components/  
│ ├── header.tsx  
│ ├── footer.tsx  
│ ├── hero-section.tsx  
│ ├── advanced-hero-video.tsx  
│ ├── version-badge.tsx  
│ ├── contact-form.tsx  
│ ├── quote-request-form.tsx  
│ ├── service-inquiry-form.tsx  
│ └── ui/  
├── lib/  
│ ├── db.ts  
│ ├── types.ts  
│ ├── utils.ts  
│ └── version.ts  
├── prisma/  
│ └── schema.prisma  
├── public/  
│ └── videos/  
├── package.json  
├── tsconfig.json  
└── next.config.js

# Next.js app directory  
# Home page  
# Root layout  
# Global styles  
# About page  
# Products page  
# Services page (PPM focus)  
# Contact page  
# Auth pages  
# API routes  
# Auth endpoints  
# Contact form handler  
# Quote request handler  
# Service inquiry handler  
# React components  
# shadcn/ui components  
# Utilities  
# Database client  
# TypeScript types  
# Utility functions  
# Version constants  
# Database schema  
# Hero video assets



## Database Schema (Prisma)

```
// Contact Form Submissions
model Contact {
  id          String    @id @default(uuid())
  name        String
  email       String
  phone       String?
  company     String?
  message     String
  createdAt   DateTime @default(now())
}

// Quote Requests
model Quote {
  id          String    @id @default(uuid())
  name        String
  email       String
  phone       String
  company     String?
  projectType String
  description  String
  budget      String?
  timeline    String?
  createdAt   DateTime @default(now())
}

// Service Inquiries
model ServiceInquiry {
  id          String    @id @default(uuid())
  name        String
  email       String
  phone       String
  serviceType String
  description  String
  preferredDate DateTime?
  createdAt   DateTime @default(now())
}

// Users (for authentication)
model User {
  id          String    @id @default(uuid())
  email       String    @unique
  password    String
  name        String?
  role        String    @default("user")
  createdAt   DateTime @default(now())
  updatedAt   DateTime @updatedAt
}
```

## API Endpoints

### Public Endpoints:

- POST /api/contact - Submit contact form
- POST /api/quote - Request quote
- POST /api/service - Service inquiry

### Auth Endpoints:

- POST /api/auth/signin - User sign-in
- POST /api/auth/signup - User registration

- GET /api/auth/session - Get current session
- GET /api/auth/status - Auth status
- GET /api/auth/csrf - CSRF token
- GET /api/auth/providers - Available providers

#### **Future /apps Endpoints (Microfrontends):**

- GET /apps - Apps directory/index
- GET /apps/gate - Magic-link authentication gate
- POST /apps/verify - Verify magic-link token
- GET /apps/[slug] - Individual app routes (12 apps planned)

## **Deployment**

#### **Current Status:**

- Deployed at: sfg-website-2025.abacusai.app
- Hosting: Abacus.AI platform
- Build tool: Yarn
- CI/CD: Checkpoint system (build\_and\_save\_nextjs\_project\_checkpoint)

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# **CONTENT STRATEGY & REQUIREMENTS**

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## **Content Pillars**

### **1. Trust & Credibility**

- UK compliance certifications (UKCA, PAS 24, Parts L/B/K/M/Q/F)
- Insurance documentation
- Project portfolio
- Client testimonials
- Team expertise

### **2. Technical Excellence**

- Detailed product specifications
- Material data sheets
- Installation guides
- Compliance documentation
- Quality control processes

### **3. Sustainability**

- Eco-friendly powder coating
- Energy-efficient products (Part L compliance)
- Waste reduction practices
- Lifecycle maintenance
- Green building standards

### **4. Digital Innovation**

- CAD automation
- Digital twin visualization
- BIM integration
- AI-powered quotation
- Project management tools

## 5. Customer Service

- PPM maintenance contracts
- Transparent pricing
- Online quotation
- Project tracking
- Warranty & support

## Content Sources (From Chat Logs)

### Files Available for Content Extraction:

- SFG\_Aluminium\_Design\_Brief.pdf
- technical\_specifications.pdf
- Warren Heathcote CV Sept 2024.docx
- SFG\_Aluminium\_June\_2025\_Strategic\_Report.docx
- Liability insurance 2024-2025 Email chats.docx
- SFG Aluminium Insurance Inspection.pdf
- Customer SFG aluminium Information.docx
- SFG\_Aluminium\_Pricing\_Template.xlsx
- SD SFG Pricing 30.04.2024 Mo.xlsx
- Curtain Wall Pricing.xlsx
- Framless Shopfront.xlsx
- Quotation Template SFG Aluminium.docx
- Competitor Benchmarking Module.docx
- Office SFG Aluminium Information.pdf
- Proforma procedure.pdf
- Production control measures.pdf
- Risk\_Assessment\_Compliance\_Checklist\_2025-07-28.pdf
- warren\_executive\_theme\_complete.pdf
- automation\_capabilities.pdf
- AutoCAD\_Abacus\_AI\_Integration\_Guide.pdf

## SEO Keywords (From PDF Chat)

### Primary:

- UK aluminium windows
- commercial roller shutters
- curtain walling UK
- aluminium shopfronts
- powder coating services UK
- fire safety compliant aluminium

### Secondary:

- Part L compliant windows
- UKCA aluminium doors
- commercial window installation
- aluminium fabrication UK
- sustainable aluminium products
- thermal efficient glazing

### Long-tail:

- "commercial aluminium window installation London"
- "UKCA compliant fire doors UK"
- "sustainable powder coating services"
- "Part L thermal efficient curtain walling"

## Content Tone Guidelines

- Professional but approachable
  - Technical when needed, but explained clearly
  - UK English spelling and grammar
  - Direct and transparent about pricing
  - Confident without being boastful
  - Solution-focused, not problem-focused
  - Regulatory compliance as a strength, not burden
- 

## COMPLIANCE & REGULATIONS

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### UK Building Regulations Scope

#### Part A: Structure

- Load-bearing requirements for curtain walls
- Fixing and anchorage specifications
- Wind load calculations

#### Part B: Fire Safety

- Fire resistance ratings for doors and windows
- Compartmentation requirements
- Emergency exit compliance
- Fire door specifications (30-minute, 60-minute, 120-minute)

#### Part F: Ventilation

- Trickle vent requirements
- Openable area calculations
- Background ventilation standards

#### Part K: Protection from Falling

- Guarding and barrier heights
- Glazing safety requirements
- Manifestation for glass

#### Part L: Conservation of Fuel and Power (2021/22 uplift)

- U-value requirements (windows, doors, curtain walling)
- Thermal bridging details
- Air permeability testing
- Future Homes Standard readiness

#### Part M: Access and Use

- Accessible entrance requirements
- Door opening forces
- Threshold levels
- Contrast and manifestation

#### Part Q: Security

- Secured by Design compliance
- PAS 24 testing
- Resistance to forced entry

## UKCA Marking & DoP

- Declaration of Performance (DoP) for all products
- UKCA marking requirements post-Brexit
- CE marking transition periods
- Test reports and certification

## Industry Standards

- **BS EN 16005:** Automatic doors safety standard
- **PAS 24:** Security testing for doors and windows
- **BS 6180:** Barriers in and about buildings
- **BS 8213-4:** Routine maintenance of windows and doors

## Compliance Documentation Strategy

- **Public pages:** Summary compliance information, trust signals
- **Gated /apps content:** Full DoP documents, test reports, technical specifications
- **Product pages:** Inline compliance flags and quick-reference tables
- **Dedicated compliance section:** Deep-dive into each Part with evidence

# INTEGRATION REQUIREMENTS

## Microsoft 365 Integration

### SharePoint:

- Lead capture storage
- Document repository
- Quote submission tracking
- Project file management

### Microsoft Graph API:

- `sendMail` for notifications
- Calendar integration for site visits
- Teams alerts for new leads
- Contact synchronization

### Power BI (Internal Only):

- Sales pipeline dashboard
- Lead conversion metrics
- Project profitability analysis
- Inventory tracking

## Third-Party Integrations (Planned)

### CAD Systems:

- AutoCAD integration for design automation
- Abacus.AI CAD sync
- DWG/DXF file handling
- BIM export capabilities

**CRM Integration:**

- Lead routing from web forms
- Contact management
- Follow-up automation
- Sales pipeline tracking

**Payment Gateway (Future):**

- Stripe or similar for deposits
- Secure payment processing
- Invoice generation
- Receipt automation

**Analytics:**

- GA4 implementation
- Event tracking:
- Quote submissions
- Contact form submissions
- Downloads (gated)
- /apps gate/verify
- Per-slug usage in /apps
- Conversion funnel analysis
- User journey mapping

**/apps Microfrontends Integration****Architecture:**

- Module Federation for independent deployment
- Shared authentication state
- Common UI chrome (SFG Aluminium branding)
- Individual remote apps (SFG Innovations branding within)

**Security:**

- Magic-link authentication (48-hour validity)
- Session cookies (90-day duration, httpOnly, Secure)
- Downloads via /api/download endpoint only
- Files stored outside /public directory
- Print watermarking (user email + timestamp)
- Content Security Policy (CSP) restrictions

**Planned Apps (12 total):**

1. quote-copilot - AI-assisted quotation
2. spec-pack-pro - Technical specification generator
3. rams - Risk Assessment & Method Statements
4. o-and-m - Operations & Maintenance manuals
5. scheduler - Project scheduling tool
6. cad-sync - CAD file synchronization
7. crm-bridge - CRM integration hub
8. cost-tracker - Project cost management
9. installer - Installer resource portal
10. site-photos - Site documentation & photos
11. compliance-hub - Deep compliance documentation
12. analytics - Business intelligence dashboard

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## PAGE INVENTORY & STRUCTURE

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### Phase 1: Foundation (Current - v1.1.0)

✓ Implemented:

- / (Home)
- /about
- /products
- /services (PPM focus)
- /contact
- /auth/signin
- /auth/signup

## **Phase 2: Expansion (Next Steps)**



### Planned:

- /products/[category] (10 categories)
  - /products/shopfronts
  - /products/windows
  - /products/manual-doors
  - /products/automatic-doors
  - /products/fire-**exit**-doors
  - /products/steel-doors
  - /products/curtain-walling
  - /products/roller-shutters-grilles
  - /products/glazing-balustrades
  - /products/accessories-hardware
- /products/[category]/[subpage] (6 subpages  10 categories = 60 pages)
 

**For each category:**

  - /overview
  - /specifications
  - /options
  - /compliance
  - /gallery
  - /**case**-studies
- /services/[service] (7 service pages)
 

Maintenance & **Spraying**:

  - /services/powder-coating
  - /services/scheduled-maintenance
  - /services/refurbishment
  - /services/warranty-repairs

(**Note**: Reactive repairs removed - PPM focus **only**)
- /sectors (8 sector pages)
  - /sectors/retail
  - /sectors/leisure
  - /sectors/education
  - /sectors/healthcare
  - /sectors/industrial
  - /sectors/offices
  - /sectors/residential-btr
  - /sectors/**public**-sector
- /projects (25 pages)
  - /projects (**index**)
  - /projects/[project-slug] (24 **case** studies)
- /compliance (13 pages)
  - /compliance (overview)
  - /compliance/part-a
  - /compliance/part-b
  - /compliance/part-f
  - /compliance/part-k
  - /compliance/part-l
  - /compliance/part-m
  - /compliance/part-q
  - /compliance/part-o
  - /compliance/ukca
  - /compliance/testing
  - /compliance/installer-competency
  - /compliance/documents
- /resources (23 pages)
  - /resources (**index**)

- /resources/articles/[slug] (20 articles)
- /resources/faqs
- /resources/glossary
- /pricing (4 pages)
  - /pricing
  - /pricing/request-quote
  - /pricing/trade-accounts
  - /pricing/finance
- /about (expand **to** 6 pages)
  - /about (company overview)
  - /about/heritage
  - /about/team
  - /about/accreditations
  - /about/health-safety
  - /about/sustainability
- /contact (expand **to** 5 pages)
  - /contact
  - /contact/book-survey
  - /contact/warranty-**returns**
  - /contact/spare-parts
- /blog (13 pages)
  - /blog (**index**)
  - /blog/[post-slug] (12 posts)
- /careers (4 pages)
  - /careers
  - /careers/openings
  - /careers/apprenticeships
  - /careers/installer-network
- /legal (8 pages)
  - /legal/privacy
  - /legal/terms
  - /legal/cookies
  - /legal/modern-slavery
  - /legal/anti-bribery
  - /legal/environmental
  - /legal/quality
  - /legal/health-safety
- /apps (16 pages)
  - /apps (**index**)
  - /apps/gate
  - /apps/verify
  - /apps/quote-copilot
  - /apps/spec-pack-pro
  - /apps/rams
  - /apps/o-**and**-m
  - /apps/scheduler
  - /apps/cad-sync
  - /apps/crm-bridge
  - /apps/cost-tracker
  - /apps/installer
  - /apps/site-photos
  - /apps/compliance-hub
  - /apps/analytics

**Total Page Count:** ~180 pages (100 minimum for initial launch)

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# IMPLEMENTATION DIRECTIVES

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## Universal Task Framework

**Source:** VERSION.md

**Purpose:** Ensure consistency and quality across all agent handovers

**Process:**

**1. Read & Understand**

- Review VERSION.md
- Check STATUS\_REPORT.md
- Read DESIGN\_BRIEF\_ALIGNMENT.md
- Consult this COMPREHENSIVE\_CHAT\_EXTRACTION.md

**1. Plan & Document**

- Define scope clearly
- Break into sub-tasks
- Document approach in VERSION.md

**2. Implement**

- Follow Warren Executive Theme
- Maintain brand separation
- Write production-ready code
- No placeholders or TODOs

**3. Test**

- Run TypeScript checks ( `tsc --noEmit` )
- Build project ( `yarn build` )
- Test in dev mode ( `yarn dev` )
- Verify all functionality

**4. Document**

- Update VERSION.md with version bump
- List all changes
- Document any new patterns
- Update STATUS\_REPORT.md

**5. Checkpoint**

- Run `build_and_save_nextjs_project_checkpoint`
- Provide clear checkpoint description
- Verify successful build

## Code Quality Standards

**TypeScript:**

- Strict mode enabled
- No `any` types without justification
- Proper interface definitions
- Type exports in lib/types.ts

**React Components:**

- Functional components only

- TypeScript interfaces for props
- Proper error handling
- Accessibility attributes
- Responsive design

**Styling:**

- Tailwind utility classes
- Consistent spacing scale
- Warren Executive Theme colors
- No inline styles (except dynamic)

**Performance:**

- Lazy loading where appropriate
- Image optimization (Next.js Image component)
- Code splitting for large components
- Minimal bundle size

**Security:**

- Input validation on all forms
- SQL injection prevention (Prisma)
- XSS prevention
- CSRF protection
- Secure authentication

## Git Commit Message Convention (Internal Documentation)

v[X.X.X] - [Brief description]

**Changes:**

- [Change 1]
- [Change 2]

**Files Modified:**

- [File 1]
- [File 2]


**Testing:**

- [Test result]

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## CURRENT STATUS & NEXT STEPS

### Current Version: v1.1.0



**Status:**  Checkpoint saved, build successful, all tests passing

**Completed in v1.1.0:**

- PPM services messaging update (removed 24/7 emergency language)
- Version tracking system implementation
- Version badge component in footer
- Authentication framework (signin, signup, session management)
- Advanced hero video design specification

- Unified Application Inventory documentation framework
- Comprehensive documentation (HANDOVER, VERSION, STATUS, ALIGNMENT)

#### **Build Status:**

- TypeScript:  No errors
- Next.js Build:  Successful
- Routes Generated: 18 routes
- Bundle Size: Optimized
- Deployment: Live at `sfg-website-2025.abacusai.app`

### **Immediate Next Steps (v1.2.0+)**

#### **Priority 1: Hero Video Implementation**

1. Create/source hero video content (15-30 seconds)
2. Optimize for multiple device formats
3. Implement advanced-hero-video component
4. Test performance and accessibility
5. Add fallback poster image

#### **Priority 2: Product Pages (60 pages)**

1. Create product category dynamic routes
2. Implement 6 subpage templates per category
3. Populate with content from specification docs
4. Add compliance flags and badges
5. Implement gated downloads UI

#### **Priority 3: /apps Foundation**

1. Set up Module Federation config
2. Implement magic-link authentication
3. Create session management
4. Build gate and verify pages
5. Implement watermarking system

#### **Priority 4: Content Population**

1. Extract content from uploaded files
2. Write unique content for each page
3. Optimize for SEO
4. Add meta tags and schema markup
5. Implement search functionality

#### **Priority 5: Compliance Section**

1. Create compliance overview page
2. Build individual Part pages (A, B, F, K, L, M, Q, O)
3. Document UKCA requirements
4. Add testing & certification info
5. Implement document gating

### **Long-Term Roadmap**

#### **Q4 2025:**

- Complete 100+ page implementation
- Launch /apps microfrontends
- Implement all 12 app slugs

- Full content population
- SEO optimization complete

**Q1 2026:**

- Expand to 180+ pages
- Add blog and news system
- Implement CMS for content management
- Advanced analytics integration
- Marketing automation

**Q2 2026:**

- Customer portal features
- Project tracking for clients
- Online payment integration
- Mobile app consideration

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## APPENDIX: KEY FILE REFERENCES

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### Documentation Files

- `/home/ubuntu/sfg_aluminium_ltd/VERSION.md` - Version tracking log
- `/home/ubuntu/sfg_aluminium_ltd/STATUS_REPORT.md` - Current build status
- `/home/ubuntu/sfg_aluminium_ltd/DESIGN_BRIEF_ALIGNMENT.md` - Design compliance check
- `/home/ubuntu/sfg_aluminium_ltd/HANDOVER_TO_NEXT_AGENT.md` - Agent handover instructions
- `/home/ubuntu/sfg_aluminium_ltd/HERO_VIDEO_IMPLEMENTATION.md` - Hero video specs
- `/home/ubuntu/sfg_aluminium_ltd/SFG_UNIFIED_APPLICATION_INVENTORY.md` - Apps inventory

### Uploaded Source Files (Content Ready for Extraction)

- `/home/ubuntu/Uploads/DeepAgent ChatLLM Core Directive.txt`
- `/home/ubuntu/Uploads/Design Prompt for SFG Aluminium Limited_ Hostinger.docx`
- `/home/ubuntu/Uploads/SFG Aluminium Logo Design.png`
- `/home/ubuntu/Uploads/SFG Website llm chat conversation.pdf` (176 pages of conversation history)
- `/home/ubuntu/Uploads/SFG Aluminium Website Specification_Pack (1).pdf`
- `/home/ubuntu/Uploads/user_message_2025-08-11_20-18-06.txt` (180+ page spec)
- `/home/ubuntu/Uploads/user_message_2025-08-11_23-11-30.txt` (SFG Innovations override)

### Generated Reports & Archives

- `/home/ubuntu/SFG_Aluminium_Forensic_Audit_Report.md/.pdf`
  - `/home/ubuntu/SFG_Aluminium_Page_Inventory.csv`
  - `/home/ubuntu/SFG_Aluminium_Project_Analysis_Report.md/.pdf`
  - `/home/ubuntu/SFG_Aluminium_Website_Specification_Pack.pdf`
  - `/home/ubuntu/Master_Project_Archive.tar.gz`
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## DOCUMENT CHANGE LOG

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### Version 1.0.0 - October 31, 2025

- Initial comprehensive extraction
  - Consolidated all chat history sources
  - Documented project evolution from August 2024 to present
  - Captured all critical specifications and decisions
  - Established roadmap for next 180+ pages
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### END OF COMPREHENSIVE CHAT EXTRACTION

This document serves as the authoritative reference for all project decisions, specifications, and context from conversation history. All future agents should consult this document alongside VERSION.md and HANDOVER\_TO\_NEXT\_AGENT.md for complete project understanding.