

THE CASE FOR THIRD PARTY FIRE PROTECTION REVIEW IN THE GCC

CONFERENCE ON FIRE SAFETY STRATEGIES

Shamim Rashid-Sumar, P.E., LEED® AP
Rolf Jensen & Associates, Inc.



INTRODUCTION

- For several years, Rolf Jensen & Associates, Inc., has conducted third party fire protection review for both private and government entities.
- We are currently approved as a third party agency for several jurisdictions including Saudi Aramco, Abu Dhabi Civil Defense, the District of Columbia, Macau SAR, and the Jebel Ali Free Zone Authority.

OVERVIEW

The purpose of our presentation today is to discuss the third party fire protection review process. We'll do this by answering several pertinent questions.

- WHO USES THE THIRD PARTY PROCESS?
- WHAT IS THE ROLE OF INDUSTRY PROFESSIONALS?
- WHY USE THE THIRD PARTY PROCESS?
- WHEN DO YOU WANT TO GET THIRD PARTY REVIEWERS INVOLVED IN YOUR PROJECT?
- WHAT IS THE THIRD PARTY REVIEW PROCESS?
- WHAT ARE SOME EXAMPLES OF F.P. PITFALLS FOUND DURING THE TPR PROCESS?

WHO USES THE THIRD PARTY FIRE PROTECTION REVIEW PROCESS?



- AUTHORITIES HAVING JURISDICTION
 - UAE
 - QATAR
 - OMAN
- END USERS
 - KSA

ROLE OF INDUSTRY PROFESSIONALS

- **MANUFACTURERS**
 - RESPONSIBLE DESIGN
- **INTEGRATORS AND INSTALLERS**
 - RESPONSIBLE INSTALLATION
- **SERVICE COMPANIES**

- **CONSULTANTS**
 - A/E CONSULTANTS
 - SPECIALIST FIRE AND LIFE SAFETY CONSULTANTS
 - **LICENSED PROFESSIONAL OR CHARTERED ENGINEERS**
 - **CANON OF ETHICS**

ROLE OF INDUSTRY PROFESSIONALS

Building Owner/Stakeholders



A/E Consultant



Licensed Fire Protection Consultant



Manufacturer Design



Licensed Distributor/ Installer



Third Party Inspector

MANY DISCIPLINES USE THIRD PARTY REVIEWERS/ INSPECTORS

- Mechanical
- Electrical
- Plumbing
- Building
- Elevators
- Fire protection and life safety systems

WHY USE THE THIRD PARTY FIRE PROTECTION PROCESS?



MITIGATE THE IMPACT OF INCIDENTS



WHY USE THE THIRD PARTY FIRE PROTECTION PROCESS?

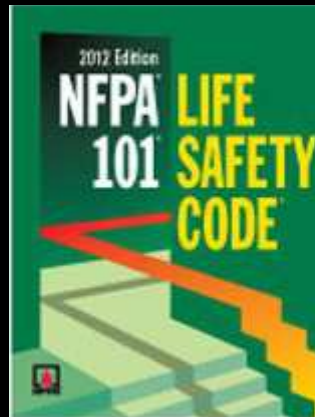
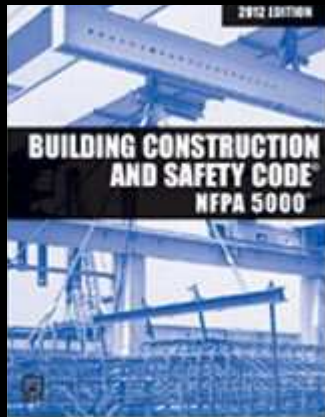
- Verify installation of specified building design / fire strategy
- Verify equivalence of installation to specified building design / fire strategy
- Value to the project
 - Timeliness
 - Consistency
 - Thoroughness
- Avoid Fire Protection Pitfalls

WHEN SHOULD THIRD PARTY REVIEWERS GET INVOLVED IN YOUR PROJECT?

- Prior to start of construction, designate an independent authority or consultant to provide design review and perform inspections


THE THIRD PARTY REVIEW PROCESS: **PRE-HANDOVER**

- REVIEW OR ESTABLISH PROJECT BASIS OF DESIGN AND BUILDING DESIGN DOCUMENTS



THE THIRD PARTY REVIEW PROCESS: PRE-HANDOVER

- DOCUMENTING THE STRATEGY



RJA
INTERNATIONAL
RISK ASSESSMENT & ASSURANCE (P.L.L.C.)
شركة رولف جينسن وترينكو
خبراء التأمين من العراق

PROPERTY REPORT
SIEMENS HEADQUARTERS MASDAR CITY PLOT L-14b IS3281 - Page 1
4 May 2011

INTRODUCTION

This report describes the fire and life safety features for the design of the Siemens Headquaters Building Plot L-14b which is located in Masdar City. The fire and life safety related features and requirements report are based on the applicable fire protection and life and regulations in addition to the Abu Dhabi Civil Defense requirements consistent with internationally recognized fire and life safety standards.

BUILDING DESCRIPTION

The Siemens Building Plot L-14b is one of the series of plots in the Masdar City Neighborhood (MIN) buildings. The high-rise building is an 11-story building including ground and roof levels with a maximum height of 110 meters. The building is located on a sloped site where one side of the building is at the ground level (+0.00 m) while the other side is open on a slope. The building is split into two separate areas on level 2. The Siemens Office Area is located on the left side and the Other Tenants Area is located on the right side. Level 5 will include offices surrounding a central atrium space. Level 5 will be accessed from both the Siemens offices and the multiple external stairs located within an atrium space connect level 1 to level 5. Four internal square shaped light wells open to sky connect level 1 to level 5 along the centerline of the building. Four internal square shaped light wells open to sky connect level 1 to level 5 and are provided on level 1 and the roof level. The ground level includes a service yard while level 1 includes an open terrace with a service yard.

FIRE AND LIFE SAFETY REPORT
SIEMENS HEADQUARTERS
MASDAR CITY PLOT L-14b
ABU DHABI, UAE

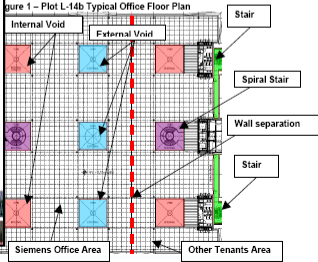
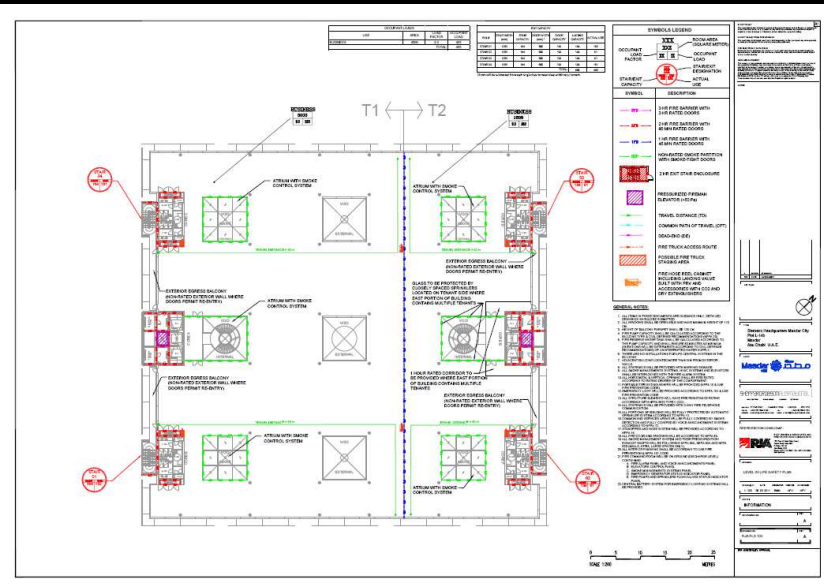


Figure 1 – Plot L-14b Typical Office Floor Plan



THE THIRD PARTY REVIEW PROCESS: PRE-HANDOVER



- IMPLEMENTING THE STRATEGY
 - Review contractor submittals (if applicable)
 - Verify in the field that installation meets the project basis of design and building design documents
 - Document findings and present to building owner

THE THIRD PARTY REVIEW PROCESS: PRE-HANDOVER

- OBTAINING APPROVAL

United Arab Emirates
Ministry of Interior
General Directorate of Civil Defence
Dubai

دولة الإمارات العربية المتحدة
وزارة الداخلية
الإدارة العامة لقطاع الدفاع المدني / دبي

INITIAL APPROVAL

APPLICATION NUMBER: PS-AAD-EEN-20-04-2011-8769
DATE: 05th April 2011
TOTAL BUILT-UP AREA: 23,000 Sq m


APPLICANT'S UNDERTAKING

Being an authorized Applicant and Receiver of Dubai Civil Defence' Initial Approval for the above mentioned project, I hereby

1. Undertake that I have read, understood and agree for all the Terms and Conditions for the Initial Approval.
2. Understand that Final Approval may be revoked and Applicant is punishable if the project details, plans, system proposals and supporting documents attached with the Application deviate from the DCD Requirements and DCD Comments.
3. Agree to comply with and implement all the DCD Requirements.
4. Understand that Initial Approval is not the Final Approval and it is only a No Objection Certificate.
5. Understand that I have to take Final Approval before starting the construction.

This document verifies that Directorate General of Dubai Civil Defence grants the Conditional Initial Approval for this project based on the above mentioned undertaking from the Applicant.

Directorate General of Dubai Civil Defence has no objection for the Applicant to proceed with Dubai Municipality formalities, Tender proceedings and Project Mobilization. However, the Consultant shall obtain the Dubai Civil Defence FINAL APPROVAL for this project before commencing the construction.


Major Jamal Ibrahim
Director
Preventive Safety Department
Dubai Civil Defence

PS-AAD-EEN-20-04-2011-8769 Page 9 of 9

United Arab Emirates
Ministry of Interior
General Directorate of Civil Defence
Dubai

دولة الإمارات العربية المتحدة
وزارة الداخلية
الإدارة العامة لقطاع الدفاع المدني / دبي

FINAL APPROVAL

APPLICATION NUMBER: PS-AAD-EEN-20-04-2011-8769
DATE: 25th April 2011
TOTAL BUILT-UP AREA: 23,000 Sq m
INITIAL APPROVAL DATE: 05th APRIL 2011

APPLICANT'S UNDERTAKING

Being an authorized Applicant and Receiver of Dubai Civil Defence' Final Approval for the above mentioned project, I hereby

1. Undertake that I have read, understood and agree for all the Terms and Conditions for the Final Approval.
2. Agree to comply with and implement all the DCD Requirements and Comments.
3. Understand that I have to apply and seek DCD inspection after the final completion of the building to acquire Building Completion Certificate.
4. Understand that Final Approval may be revoked and Applicant is punishable if the Building's Fire and Life Safety standards deviate from the DCD Requirements and DCD Comments.
5. Understand that I have to safeguard all the final approved drawings and documents for future references.

This document verifies that Directorate General of Dubai Civil Defence grants the Final Approval for this project based on the above mentioned undertaking from the Applicant.

Directorate General of Dubai Civil Defence has no objection for the Applicant to proceed with Building Construction. However, the Consultant shall obtain the Dubai Civil Defence FINAL BUILDING COMPLETION CERTIFICATE for this project before allowing occupancy, business or any commercial activity in this facility.


Major Jamal Ibrahim
Director
Preventive Safety Department
Dubai Civil Defence

PS-AAD-EEN-20-04-2011-8769 Page 9 of 9

THE THIRD PARTY REVIEW PROCESS: **HANDOVER**

- CHECKLIST

- **APPLICABLE CODES**



- **FIRE STRATEGY**



- **IMPLEMENTATION**



- **APPROVAL**



~~THE THIRD PARTY REVIEW~~ ~~PROCESS:~~ POST-HANDOVER

- CHECKLIST

- APPLICABLE CODES
- FIRE STRATEGY
- IMPLEMENTATION
- APPROVAL



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



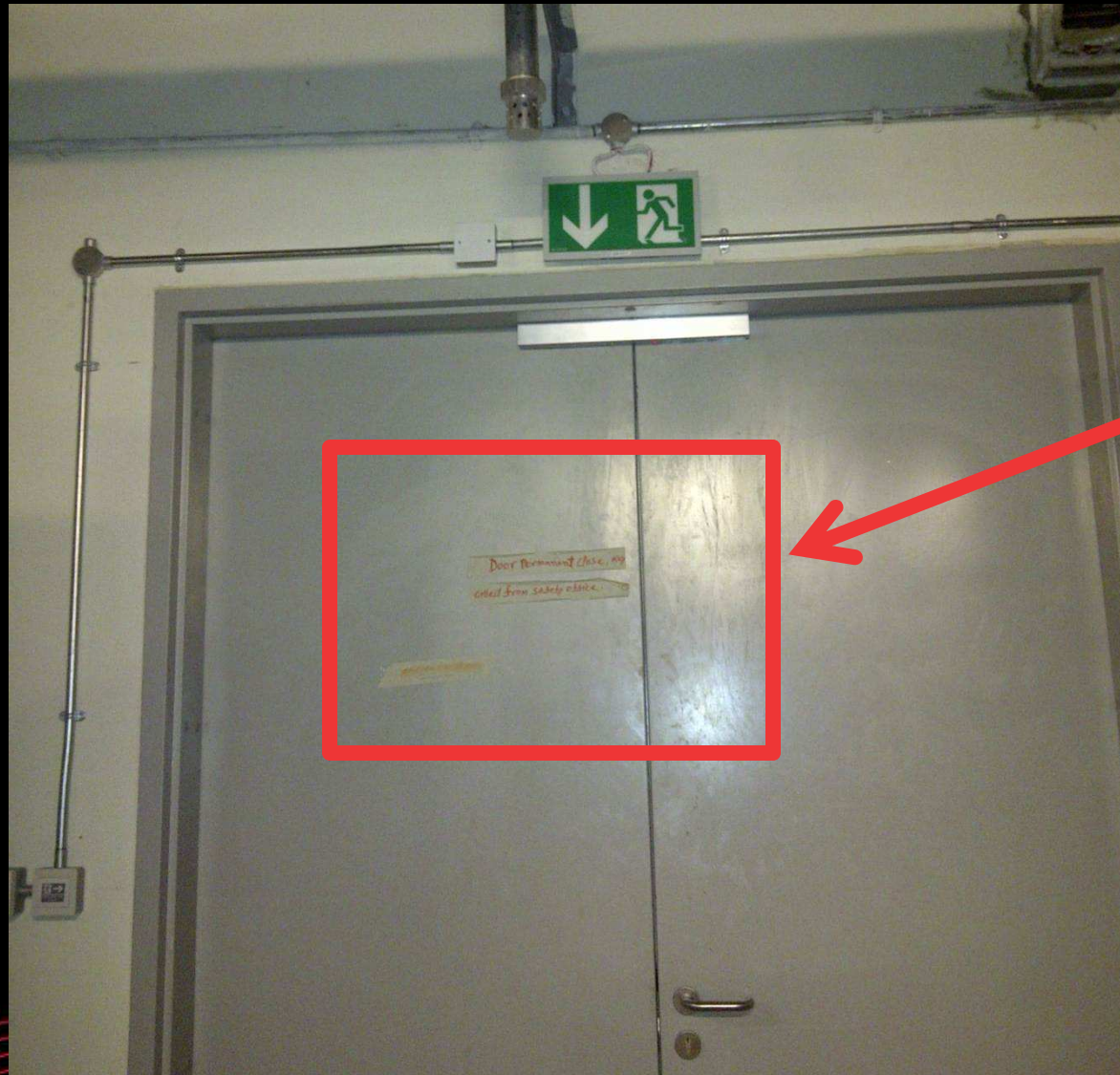
EXAMPLES OF FP PITFALLS



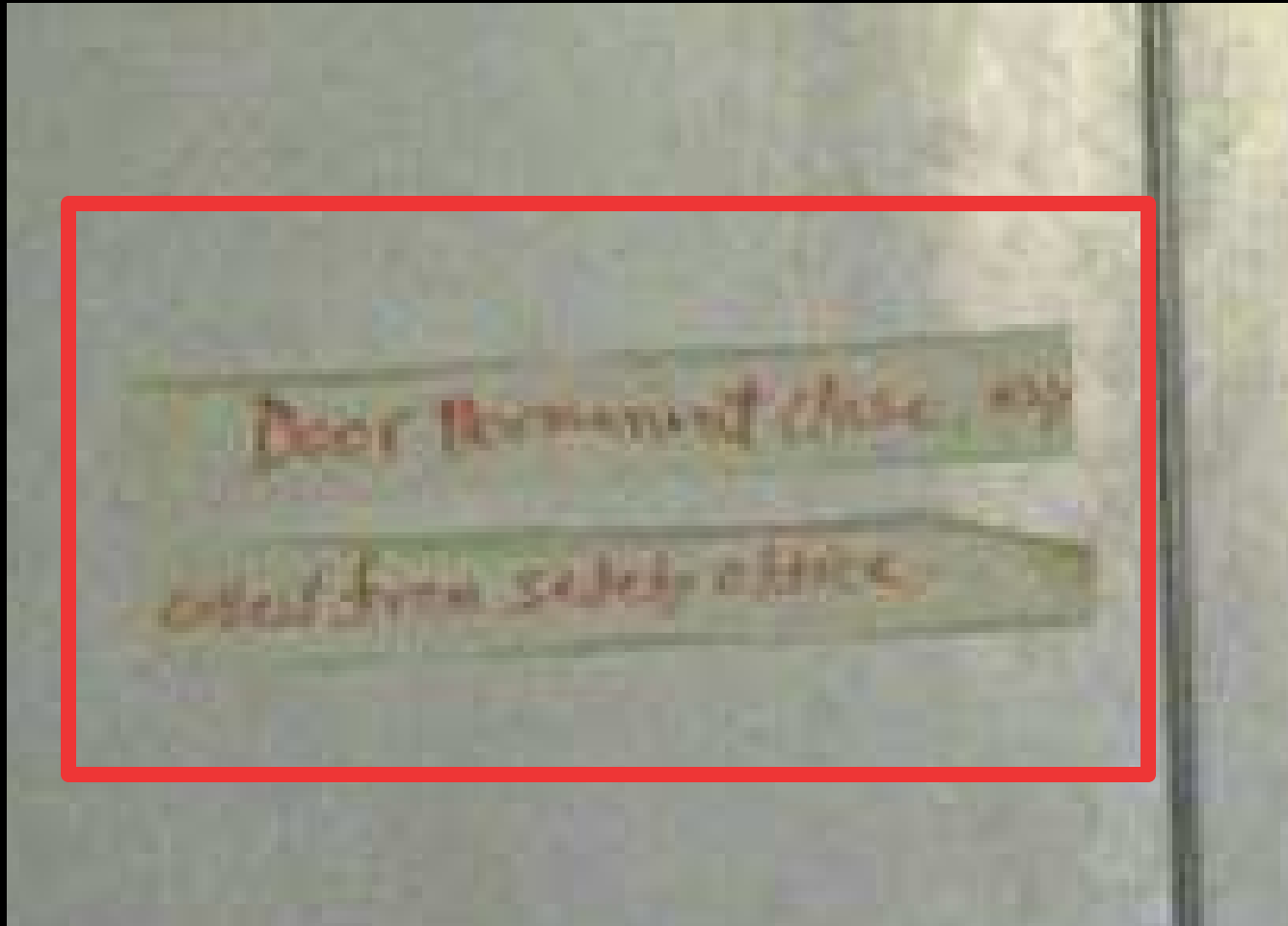
EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



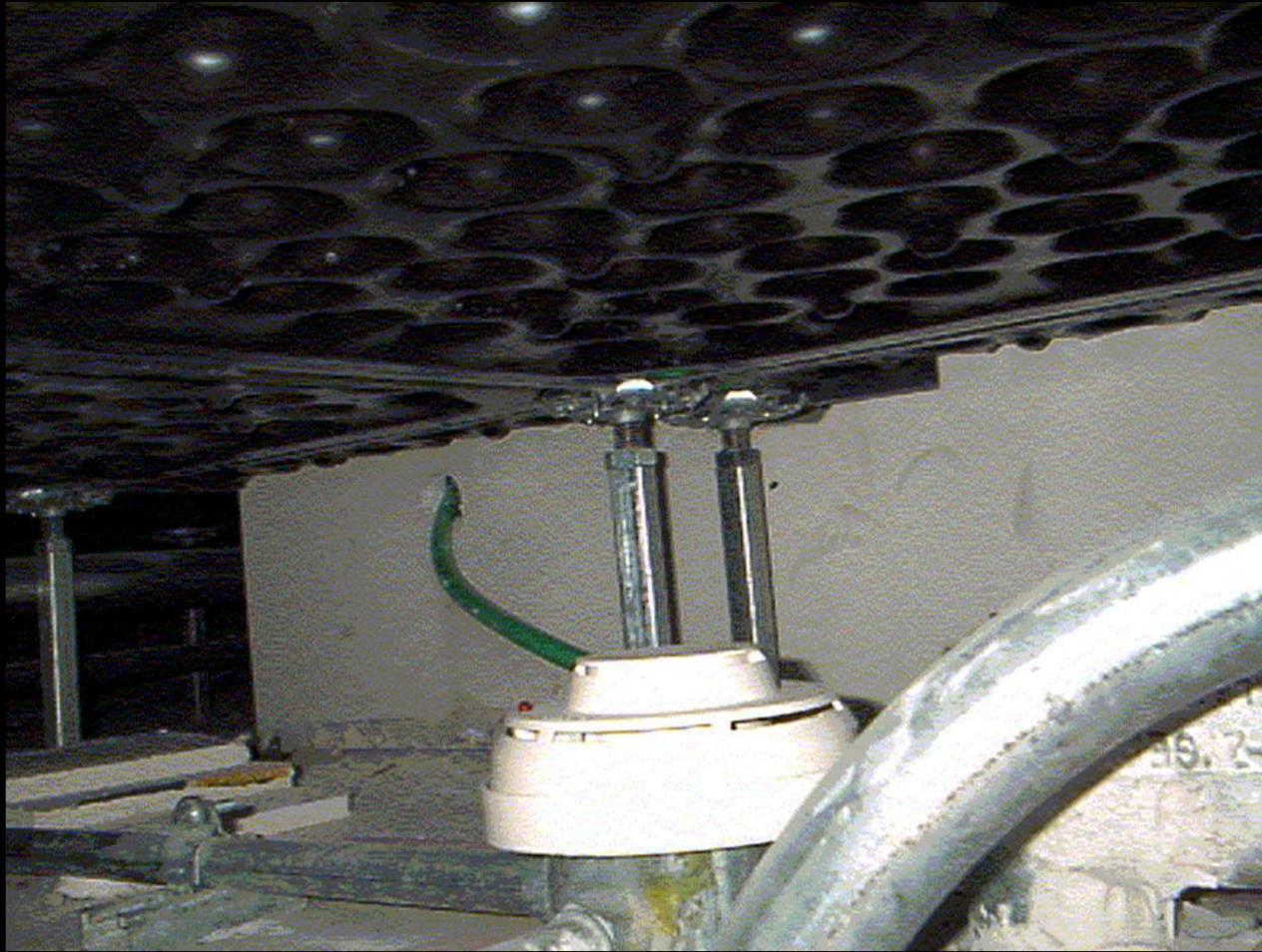
EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS



EXAMPLES OF FP PITFALLS





THE CASE FOR THIRD PARTY FIRE PROTECTION REVIEW IN THE GCC

SHAMIM RASHID-SUMAR, P.E., LEED® AP

Rolf Jensen & Associates, Inc.

Building 6, Office 204

Gold and Diamond Park

Sheikh Zayed Road

P.O. Box 37549

Dubai, UAE

Telephone: +971 4 323 7120

ssumar@rjagroup.com