



Techlinea Design Project Questionnaire:

Note: This questionnaire is also available to be filled out online at www.techlinea.com

Client Name: _____
Address: _____
Telephone: _____
Fax: _____
Email Address: _____
Project: _____

This questionnaire has been developed by Techlinea Design Inc., to allow our consultations to be as efficient and productive as possible. Please take the time to review and answer as many questions as appropriate. There may be questions here that could be better reviewed in person, if so, please simply check them to be reviewed later. We understand that you may not be interested in all of the services outlined in this questionnaire so kindly disregard sections that do not apply to your project. In the course of planning for our initial consultation we recommend that you get as much information prior to our meeting as possible. This could and should include pictures, magazines, articles of interest, etc. The more information that we have at the onset, the faster it will be for us to generate a concept that will suit your lifestyle. This questionnaire is broken up into seven sections. All information provided herein will remain confidential.

1. Electrical design
2. Lighting Design and Controls
3. Audio video- Media- Home Theater
4. Smart house technology
5. Security & Surveillance
6. Media, Audio, Video
7. Telecom, Wireless-LAN
8. Energy Management systems

Electrical Requirements:

Is this a new project or a remodel?

Will you require emergency a generator or photovoltaic?

Please check the electrical equipment that you expect to have specified for this project:

Electric Gates
Elevator
Wine Room Compressor
Sewage Ejectors
Fountains
Jacuzzi
Steam Generator

Garage Door Openers
Car Lifts
Sump Pumps
Catering Power
Spas
Sauna
Heated Floors

Electric Ovens
Refrigerated Drawers
Salamander
Instant Hot
Garbage Disposals
Venting & Blowers
Refrigerator/Freezers
Heavy Duty Dishwashers
Heavy Duty Washer-Dryer

Electric Cook Top
Espresso Machines
Built-in Coffeemakers
Microwave
Trash Compactors
Electric Grill
Warming Drawers
Wine Coolers
Disposal Air Switch

Air Conditioning
Attic Fans
Air Transfer System
Transom Windows
Motorized Drapes
Motorized Screens
Security System
Dedicated A/V
Air Compressor
Power for caterers

Heating Equipment
Water Heaters
Air Circulation Systems
Motorized Skylights
Motorized Shades
Motorized Projectors
Telecom System
Pool Equipment
Centralized Vacuum
exterior entertainment circuits

Sub panel for occasional high draw loads:

Shop equipment: stationary power tools or other devices not listed here:

Lighting Design

Note:

As of January 1, 2010, California has updated the Energy Standards Title 24 code mandating that a minimum of 50% of the kitchen lighting be produced by energy efficient light sources.

Only pin based, and GU 24 Base lamps are considered (energy efficient) high efficacy fixtures. Screw-in or retrofit sockets do not qualify as high efficacy and will be rejected. Any fixture that can change from pin configuration or GU 24 to screw base socket without replacing the entire fixture will be rejected.

Bathrooms: (Any room having a sink, toilet, shower, or tub used for personal hygiene is considered a bathroom) **All** hardwired lighting must be high efficacy (Fluorescent or LED) or be controlled by manual-on, auto-off occupancy sensors.

Garages, laundry, and utility rooms must meet all the same requirements as apply to bathrooms.

ALL other rooms: hallways, stairs, dining rooms, bedrooms, etc. with hardwired lighting must be high efficacy OR controlled by manual on occupancy sensor, controlled by a dimmer or a lighting control system.

Under this new code all outdoor lighting attached to the building must be energy efficient or controlled by motion sensor, **AND** manual override switch, **AND** a photo cell.

*** Landscape lighting not attached to the building is exempt from these standards.**

What's the approx. generation of the persons to live in this residence?

How many people will live in this residence?

Who will be the person or persons having the final say in the decision making process? You, your Interior Designer, Architect?

Please describe what you like about your current lighting system.

Describe what you dislike about your current lighting system.

Is this residence to be used exclusively by one family, or do you anticipate live in guests?

Do you entertain: Often Sometimes Rarely

Are your entertainment events usually:

Formal often / rarely	Semi formal often / rarely	Casual often / rarely
--------------------------	-------------------------------	--------------------------

Do you hire outside staff for your parties?
Do you need additional power for catering equipment?

Describe the architecture and design that you anticipate for this residence.

Are you currently working with an Interior Designer, Architect, or Builder?

Are you familiar with low voltage lighting, recessed lighting, recessed fluorescent lighting, halogen light sources, cable lighting, low voltage rail systems, LED or cold cathode?

Do have any particular likes or dislikes for any of these light sources?

Do you have any particular concern about ceiling fixture aperture, trim type, trim color, and trim flanged color.

Do you like surface mounted fixtures? Sconces, Chandeliers, Pendants?

If so, is your taste classical, contemporary, or traditional?

Is brightness a critical factor or is ambiance more important?

Indirect: is lighting that is shielded and usually uses another element such as the lens, walls or ceiling to redirect the lighting into the space, example: up lighting- lighting through opaque sources such as Sconces, Lamps, Coves, etc.

Direct: is any lighting that openly directs its light source at the object being lighted, example: down lights, accent lights, under cabinet lights.

Controls:

Title 24 Code- All other rooms besides kitchen and baths: hallways, stairs, dining rooms, bedrooms, etc. with hardwired lighting must be high efficacy OR controlled by manual on occupancy sensor, controlled by a dimmer or a lighting control system.

Is the ability to universally control the lighting important to you?

For example: all lights controlled from key locations

Are you interested in setting scenes, if so, would you like the ability to set:

- 1) Scenes for daily functions or entertainment.
- 2) Entry lights- exterior -interior
- 3) Pathway lights
- 4) Night lights
- 5) Timed functions
- 6) Motion controlled functions
- 7) Landscape lighting
- 8) Fountains, pumps, gates
- 9) Security lighting

Which room/rooms require the most attention?

Will there be a home office? Computers? Night-time work?

Will there be a Media room/Home Theater?

If so would you like to have preset lighting scenes for?

Movies	Entertainment	Reading
Exterior Lighting	Music	Television

Would you like to be able to automatically control or integrate any of the following?

Drapes	Windows	Screens	Lighting
Fireplace	Projector	Media System	Video System

Why would you want to integrate or control these automatically?

Convenience, Safety, Security, Energy Management, Lifestyle

KITCHEN:

Please note: New California energy standards Title 24 mandate that 50% of the kitchen lighting be produced by energy efficient light sources. Currently only fluorescent lighting and LED lighting produce the min. 40 lumens per watt to comply as energy efficient light sources.

We will work creatively with you to ensure that we meet energy standards while providing you with the most appealing and comfortable lighting environment for this very important room of your residence.

What are the surfaces to be used in the kitchen? Marble, Granite, Laminates? *Our concern here is the reflective value of these surfaces for areas such as countertops, islands, and peninsulas.*

Do you like lighting inside the cabinets for stemware, crystal objects, and plate collections? *If so, please consider that glass shelves are best for lighting shelves from above; otherwise, the cabinet will need either vertical strips or shelf mounted accent lights.*

Would you like the ability to program preset scenes, i.e. Cooking, Dining, Entertainment, Cocktails, Clean-Up, or Homework?

Please give us some information on the cabinetry that you will be using in this residence.

Do you like indirect cabinet mounted up lights?

Will there be a lot of windows surrounding the Living Room, Family Room, and Kitchen etc. Are night-time and evening views important from these rooms? *Particular attention must be paid to these rooms if that is to be the case. Windows and glass doors become black mirrors at night if the exterior lighting is not adequately addressed. Please note the following:*

- a) Unbalanced exterior lighting causes interior lighting to reflect on the windows making it difficult to see outdoors.
- b) Consider window treatments for heat, sun, and glare control.

Notes:

BATHS:

New California Energy Standards Title 24 mandate that all bathroom lighting must be high efficacy -energy efficient light or controlled by occupancy sensors.

Will there be a make up area or simply a vanity?

Will there be a dual vanity or a shared vanity?

Will there be dual baths or a shared bath?

Will this vanity area have a plate mirror, decorative or an articulated mirror?

Do you dress at the same time? If so, do you each require your own lighting and controls, for grooming, bathing, and dressing?

Do you prefer down lights in your vanity?

Will you require lighted make up mirrors?

Note: Down lighting over vanities and sinks is not advised, but if they must be used, we recommend that they are complimented by side mounted fixtures for the best task lighting. Down lighting creates harsh shadows around the face and especially beneath the eyes and chin: not good for make up or shaving.

Will there be a Jacuzzi or Spa? If so do you enjoy reading in the spa?

Will you have a heating zone in the baths or will you use toe kick heaters, heated floors, or heat/fan/light combo?

Have you consider your need for skylights, windows, fans, and how they need to be controlled.

Will audio- video or telecom be part of this Master Bath design? If so, let's consider speakers, video feeds, system controls, etc.

LIVING ROOM-GREAT ROOM-FAMILY ROOM:

Will you be lighting any particular pieces of art or sculptures?

Do you have a color scheme, surfaces, and fabric samples?

Is this room to be used for family, entertainment, or both?

Do you like indirect lighting as opposed to direct sources of lighting?

Do you use table lamps or portable reading lights?

Do you like lamps to be controlled as part of your lighting scheme?

Do you require floor outlets, switched?

Are there any areas that need special attention? Game table, piano, conversation areas, fireplace, patio, garden views?

Please list any items that we have not considered:

DINING ROOM

Will this be a formal dining room?

Do you prefer Chandeliers over the dining table?

Do you like Sconces to be used for ambient lighting for the perimeter of the room?

Do you have table arrangements that need to be high-lighted?

Do you anticipate art or accent features in this room such as: paintings, murals, sculptures etc . . . ?

Will the dining table be solid or Glass?

Will the dining table enlarge or collapse?

How many people will your dining room seat?
Does this dining room need to change it's configuration during entertainment?

MASTER BEDROOM SUITE

Do you read in bed?

Would you like preset scenes for the Bedroom?

Nightlight	Path lights	Reading lights	Master Off
Security	Ambient	Movies	Master On

Is there a Sitting Room attached to the Master Bedroom Suite?

Will there be any audio or video setup in the Master Bedroom?

EXTERIOR LIGHTING:

Is security lighting important in this residence?

If so, we will determine with you which lights would be best suited to be integrated with security and fire protection.

We need to determine your municipality's particular codes regarding exterior lighting, every district is different. If you have any particular exterior lighting concept in mind, please introduce it in our meeting.

Is there anything that you particularly like or dislike regarding exterior lighting?

Would you like to see the following illuminated:

Trees	Building	Planting Beds	Driveway Path
Columns	Stairs	Niches	Exterior Statuary
Pools	Ponds	Loggia	Tennis Courts
Patios	Decks	Fountains	Car Port
Garage			

Code issue

You will be required to provide an entry/exit light at every door leading to and from the building. Any light source that is connected to the building must be high efficacy or controlled by motion sensor, manual override switch and photocell, or controlled by a lighting control system.

We strongly recommend photocell or motion operated devices for security and energy conservation in Garages, Closets, Pantry, Storage Rooms, Equipment Rooms, and Laundry.

Questions:

Integration and Automation

With an integration system, formerly disparate home systems can be controlled from a single convenient location and function in concert with one another. Some of the newer microprocessor based lighting control systems offer a very high level of home automation and Integration. There are also some excellent stand alone units that provide home automation and integrate with existing lighting systems. Some of these manufacturers are Crestron, Savant, Home works, Vantage Controls, Lightolier Controls. Almost all of these systems now integrate with the iPad, iPhone, Itouch and emerging Android technology.

What are the advantages of home automation?

1) **Lighting functions:**

- a) *Lights can be programmed to interface with security systems.*
- b) *Programmed to mimic historical lighting usage when you're away.*
- c) *Switches can be programmed to operate any lighting group at anytime.*
- d) *Programmable master all on or all off.*
- e) *Astronomical clock functions.*
- f) *Programmable event lighting scenes.*

2) Energy Management:

- a) Lighting, electrical or electronic equipment can be monitored, turned on or off automatically.
- b) Security systems can interface with lighting system
- c) HVAC, skylights, transom windows, and fans can be integrated for best use of heating and cooling equipment.
- d) Programmable heating and cooling
- e) Automatic gates, fountains, irrigation, sprinkler systems
- f) Control electronic shades and drapes

3) Entertainment

- a) Audio-video equipment can be designed for one touch functions eliminating the need for several remotes.
- b) Audio Video equipment can be integrated with lighting, drapes, shades, and HVAC for maximum user comfort.
- c) Automatic scene setup for entertainment, Media Rooms, home theaters

4) Security

- a) Disarming security system automatically turns on selected lights
- b) Arming security system turns off lights. Closes shades & electronic windows
- c) Panic-emergency mode can selectively call: police-fire ambulance, flash property entry and open gate.
- d) Lighting vacation mode can arm security system, forward video surveillance to remote site.

Here is a sampling of the some items that you could integrate or automate. Please check any items that you'd like to see as part your system:

Car Lifts	Transom windows	HVAC Systems
Electric Gates	Drapes	Irrigation Systems
Garage Openers	Electronic Shades	Heated Floors
Elevators	Motorized Skylights	Pool Controls
Fountains	Video Projectors	Jacuzzi
Sauna	Video Screens	Sprinkler System
Steam Units	Audio-Video System	Lighting System
Security System	Electronic Fireplace Starter	Electronic Shades

Client Notes:

Security:

Our First recommendation prior to designing a security system is to evaluate your personal security needs, your property's security needs, and determine the safety of the area in which you are planning to move into or build. Please consider the following preliminary steps:

- 1) Get an incident report or survey from your local police dept. for the last 6 months of police activities in your area.*
- 2) What are the most prevalent incidents in your area?*
- 3) Find out what the expected police response time is in your area.*
- 4) Talk to your new neighbors, or the people who sold you the property.*
- 5) Check out the public lighting system surrounding your property.*

The following is a list of security features that could be set up for your residence, please check off those that you're interested in having or would like to have more information about. Although we specialize in very sophisticated security systems, a lot can be accomplished with lighting, planting, and perimeter design.

High profile security requirements:

Exterior Perimeter Protection	Safe Room
Cellular Security Interface	Electronic Entry Access
Portable Panic Devices	Staged Zone Protection
Interior perimeter protection	Exterior Surveillance System
DVR Digital Video Recording System	Skylight Contacts
Lighting Integrated Protection	Remote Keypads
Auto Integrated Security	Fire Protection
Tamper Proof Locking systems	Fiber Optic PIR Detectors
Central Station Monitoring	Entry Surveillance
Door & Window Contacts	Sprinkler System Control
Sensor Pads - Floors, Stairs	Pool Surveillance
Interior Surveillance	Vaults and Safes
Child safety systems	kidnapping Deterrence

Medium security requirements:

Residence Perimeter protection	Security Keypads
Surveillance System	Motion Sensors
Sensor Security Lighting	Portable Panic Key Fob
Monitored fire protection	Window Contacts
Central Station monitoring	Sprinkler Control
DVR Digital Video Recording system	Pool Surveillance
Security Integrated Fire Protection	Lighting Integrated Protection

Minimum security requirements:

Interior Perimeter Protection
Motion Sensor
Monitored Fire Protection
Phone Interface
Central Station Monitoring

Security Keypads
Window Contacts
Security Lighting

Life Safety:

National Electric Code requires that every bedroom, stairway landing and hall have communicating smoke detectors on a dedicated electrical circuit. Because we realize that these devices are un-slightly but necessary for life safety we have adopted and recommend VESDA a new invisible smoke detection technology that will protect your entire home from fire, Co2, and other harmful gases better than current visible ceiling mounted detectors.

Specialty requirements

Audio-Video:

Will this residence have an audio system, if so, please consider these options?

Will this system be a multi-zone audio system?

In a multi-zone or distributed audio system each room (zone) has independent control over volume and source content (radio, iPod, DVD, Video)

How many zones will you want to set up?

Kitchen	Living Room	Family Room
Dining Room	Powder Room	Theater
Master Bedroom	Master Bath	Guest Room *
Guest Bath	Entry Foyer	Garden
Pool Area	Garage Office	Den
Sitting Room	Guest House *	Library
Media Room	Separate Floors	Children's Audio System *

* *We recommend totally separate audio system for these rooms.*

Will there be a central location for the audio system such as a Media Room, or a media closet (some people prefer to see all their equipment; some people prefer not to see it)?

Do you prefer keypads, remote hand control, web browser, touch screen panels or portable tablets.

Keypads are wall mounted devices in a permanent location.

Portable controls are the standard hand held remote controls allowing freedom of movement.

Touch panels: either wall mounted or table top screens with a custom-designed interface are either RF (radio Frequency) or WIFI and provide **bi-directional** communication.

Why is bi-directional communication important? Because when you press a button on a standard remote, you're telling a piece of equipment somewhere to do something; if you're not in the same room as the equipment you don't know whether it has responded or not. Example: turning-on the stereo, if you press POWER, it may go on, but if it was "on" it will go "off". You won't know what state it's in unless you go and look or if music comes on.

With bi-directional communication, when you press the power button the remote sends the Command, the stereo will respond and send back a message indicating that it's **on**.

Video

Will this residence have video distribution, satellite TV, security cameras and closed circuit television?

We recommend video surveillance cameras for viewing gate entry, front door, pool areas, and/or remote access entry points. Cameras can be viewed on any video source TV, plasma screen, projector or computer in the residence; video feeds are played on unused dedicated channels. Video images can be stored on DVR (digital video recorders) for an added measure of security, web based systems allow storing and viewing surveillance cameras from remote locations if necessary.

Will there be a designated Theater or Media Room?

Please check off from the following list items that will be part of your audio video system:

Flat Screen TV	Music Server	Electronic Video Screen
Blue Ray DVD Player	IPOD Interface	Video Surveillance
Video Server	Surround Speakers	Sub Woofers
Video Projector	Surround Amplification	Apple TV
Surround Processor	Programmable Remote	AV Keypads

Exterior Speakers	Remote Volume Controls	CD Changers
Pop Up Video Cabinet	Projector Lift	Electronic Shades
Video Game Interface	Computer Interface	Wireless audio

Are there are any features that you are particularly interested in getting information about in order to decide what you need?

Telecom:

If this residence is going to have more than (6) phones and more than (4) lines, or requires intercom or door/ gate interface we recommend a phone system. The following are the advantages of a phone system:

Up to 12 lines and 24 Handsets	Intercom-Gate Release
Multiple Door Calls	Multiple Door Release
Gate Opener	Privacy Features
One-Button Functions	on Screen Programming
Modem Integration	Fax Integration System
Portable Cell Phones	Assignable Ringing
Voicemail System	Paging
Transferable CO Assignments	internal portable cell handsets
Standard Handset Integration	

Finally, consider your current and future Internet – Broadband needs. Do you currently own or plan to use any of the following:

Computer Fax Wired LAN Wireless 802.11 G/N Fiber-optics

For new construction we recommend extensive data wiring as CAT5/5e is relatively inexpensive and is currently capable of handling many functions in the low voltage domain. It's far more cost effective to add it to as many areas as needed now, than to try to re-pull later. RF Wireless technology is available but is still not 100% reliable for all applications.

Note:

During the construction of this project, we highly recommend the use of conduits and chases to key distributions sites for the low voltage and data wiring. A nail or a cut conductor can render a good portion of your audio/video, security, telecom or LAN system useless, these paths will also provide future access for emerging technologies

Please take the time to list any features of interest to you that we have overlooked.

Back up power system:

If you live in an area that has frequent power outages you should consider a back up power system. Dual fuel generators have gotten very inexpensive and natural gas generators are extremely efficient. If you live on a hillside or your lowest level is below grade, not backing up a sump pump or sewage ejector would be more costly than the cost of generator. The following is a list of electrical systems that we recommend be backed up.

Security System	Telecom System	Refrigerators & Freezers
Electric Gates	Garage Doors	Sump Pumps
Sewage Ejectors	Microwave	Electronic Transom Windows
Security Lighting	Safety Lighting	Utility & Convenience Outlets
Selected Lighting	Instant Hot	Dedicated AV Circuit

Some counties/regions are also offering energy and tax rebates for installing photo voltaic systems. PV Power can be stored in batteries or excess power can be sold back to PG&E during peak demand periods of the day allowing you to take advantage of off peak rates.

Thank you for taking to the time to review/complete this questionnaire; we've found that while it may not cover all your questions or concerns, it does help us develop a highly accurate assessment of your needs.

All information derived from this questionnaire is highly confidential and is treated as such.